

1226

LIBRARY





John G. Wright

BULLETIN

OF THE

National Association

OF

WOOL MANUFACTURERS,

1912.

FOUNDED NOV. 30, 1864.

EDITED BY WINTHROP L. MARVIN, *Secretary.*



VOLUME XLII.

BOSTON, MASS.

1912.

T 5 1600

N 2

Copyright, 1912,

By NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

TS1600
N2

CONTENTS.

MARCH.

	Page
I. FORTY-SEVENTH ANNUAL MEETING OF THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS	1
Officers for 1912	2
Report of the Secretary	4
II. REPORT OF THE TARIFF BOARD	8
Extract from President Taft's letter of transmission to Congress	8
Synopsis of the Tariff Board Report	9
Findings of the Investigation	13
Wool Costs	13
Relative Prices	19
Relative Costs	20
Wages and Efficiency	31
III. THE NATIONAL WOOL GROWERS CONVENTION AT OMAHA	33
Address by President Gooding	33
Remarks of Mr. Jacob F. Brown	36
Resolutions Adopted	39
IV. THE MANUFACTURER'S RESPONSIBILITIES. An address by Mr. Franklin W. Hobbs to the Southern New England Textile Club, at Providence, Rhode Island	41
Stockholders not all Wealthy	42
Average Stock Holdings Small.	43
Present Improved Manufacturing Conditions	45
The Executive and His Obligations	47
V. OBITUARY	50
Mr. John G. Wright (with portrait)	50
VI. EDITORIAL AND INDUSTRIAL MISCELLANY	52
A Great Work Done. The Report of the Tariff Board, For American Made Cloths. Action of the Boston Wool Trade Association	53

	Page
Senator Lippitt on Protection. Address before the Silk Association of America at New York	54
The Factor of Home Competition	56
No Monopoly in Textiles	58
No Excessive Profits	59
The Bradford Trade in 1911. (The Bradford Observer's Report)	62
Letter from George C. Hetzel to Hon. Oscar W. Underwood	75
The Wool Manufacture in Australia	82
An Industry Worth While? Professor Taussig quoted and a Protectionist Reply	83
Scotch Border Tweeds	89
 VII. COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL AND MANUFACTURES OF WOOL, TWELVE MONTHS ENDING DECEMBER 31, 1910 AND 1911 . .	 91
 VIII. QUARTERLY REPORT OF THE BOSTON WOOL MARKET .	 94

JUNE.

I. THE UNDERWOOD WOOL AND WOOLEN BILL. Second consideration in the National Senate and House of Representatives	97
Chairman Underwood's Majority Report	97
The Tariff Board's Report Criticised	100
Expected Revenue from the Underwood Bill, with table, Text of the Underwood Bill	101
Views of the Republican Minority	105
Text of the Payne-Hill Bill	108
The Underwood Bill before the House	115
Address of Hon. E. J. Hill	123
Address of Hon. Frank D. Willis	124
Address of Hon. Sereno E. Payne	127
Address of Hon. Frank W. Mondell	129
The Underwood Bill in the Senate	130
 II. OBITUARY	 134
Royal Chapin Taft	136
Benjamin F. Mellor	136
Jacob W. Mack	137
 III. EDITORIAL AND INDUSTRIAL MISCELLANY	 138
The Great Strike in Retrospect; Lawrence, Its Aftermath of Increased Wages and the I.W.W.	139

CONTENTS.

v

	Page
Occupations and Weekly Earnings in the United States and Great Britain in the Woolen Manufacture . . .	142
Western Wool and the Panama Canal. Saving in both Ocean and Railroad Freight Rates	143
The New Cotton Bills. Proposals of Chairman Underwood and Representative Hill for the Revision of Schedule I.	145
The Underwood Cotton Bill	145
The Hill Cotton Bill	149
Letter of Chairman Henry C. Emery, on Cotton Manufacturing Costs	154
The Minority Report on the Underwood Cotton Bill,	155
The Wool Market in the West. The Clip of 1912 . .	157
Technical Education at Keighley. Reminiscences of Sir Swire Smith	161
Lower Wool Rates from Detroit	166
How Wool Growing Pays in Australia	167
"Per Thousand Picks"	168
The Effect of Free Wool in the Northwest, by Robert C. Line in the Quarterly Journal of Economics . .	170
Luster in Fabrics. Its Cause and Character	172
Commercial Progress in Ireland. Consul Hunter Sharp Quoted	176
The Leicester Sheep. The Wool Record Quoted . .	181
New England (Australian) Wools	182
Notes on the Australian Wool Year. Goldsbrough, Mort & Company's Review Quoted	184
The Woolen Industry of India	187
IV. QUARTERLY REPORT OF THE BOSTON WOOL MARKET .	188

SEPTEMBER.

I. THE UNDERWOOD-LA FOLLETTE BILL	191
A Summary of the Action of Congress and the Executive Veto	191
The Cummins Substitute	191
Address of Senator Cummins	197
The Finance Committee Substitute	199
A Republican Reduction, Senator Penrose	204
The La Follette Bill	206
In the Senate	207, 212
In the House	210
President Taft's Veto Message	213
The Veto Sustained by the Senate	217

	Page
II. THE LAWRENCE STRIKE OF 1912. By John Bruce McPherson	219
The Outbreak and the Reason Given for It	221
Were Inducements Offered to Immigrants?	225
Leader Ettor's Prompt Appearance	227
Violence and Destruction of Capitalism Advocated	230
Formulated and Other Grievances of the Strikers	234
The Premium System	236
Wages Paid in the Industry	237
Investigation Urged by Governor Foss	241
Liberty of Speech Abused	242
A Riot and a Death	244
An Open Letter from Governor Foss	244
A Legislative Conciliation Committee	246
The Weakness of Organized Labor at Lawrence	249
Sending Away of Children	251
A Campaign of Misrepresentation	258
A Campaign of Violence	261
Lessons of the Strike	263
III. WOOL INVESTIGATIONS AT THE BUREAU OF STANDARDS.	
By D. E. Douty	266
Sample Scouring	267
A Study of Regain	268
IV. EDITORIAL AND INDUSTRIAL MISCELLANY	271
A Clear-cut, Economic Issue; Protection <i>vs.</i> Free Trade Presented by Platforms and Candidates in the National Campaign	271
Another Futile Attack in Congress; the Revived Under- wood-La Follette Bill and Its Veto	274
A Historical Review of British Efforts to Crush Ameri- can Manufactures. By James M. Swank	277
Those So-called Weavers' "Fines." An Important Decision for the Mills by the Supreme Court of Massa- chusetts	282
New Textile Directories	289
Some Peculiarities of the Wool Fiber: Suint, Yolk, Curl in Wool Fibers, Gray Fibers, Cots, Kemps. By W. T. Ritch, in the "Canadian Textile Journal"	290
The Relation of the Horse-Power to the Kilowatt, United States Bureau of Standards	297
Women's Wages in Provincial France. By Carl B. Hurst, United States Consul at Lyon	298

	Page
V. COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF WOOL AND MANUFACTURES OF WOOL FOR THE TWELVE MONTHS ENDING JUNE 30, 1911 and 1912	301
VI. QUARTERLY REPORT OF THE BOSTON WOOL MARKET FOR APRIL, MAY, AND JUNE, 1912	304

DECEMBER.

I. ANNUAL WOOL REVIEW. By William J. Battison . . .	307
Review of the Year	307
Number of Sheep, 1912	310
The Wool Product of 1912	310
Value of the Clip	313
Fleece, Pulled and Scoured Wool, 1888-1912	314
Available Supplies	316
Wool Produced, Imported, Exported and Retained for Consumption	317
Slaughter and Movement of Sheep	319
Course of Prices (with chart)	321
The Angora Goat, and Mohair Production in the United States	321
Statistical Tables, Imports of Wool and Wool Manu- factures	324
The London Market	334
Liverpool Sales	342
Antwerp Auctions	344
South American Wool Production	346
Number of Sheep in the World	350
Australian Wool and Sheep Statistics	352
South African Wools	340, 361
Wool Shipments to Japan	363
Wool Production of the World	366
II. "IMMIGRATION AND LABOR." By Isaac A. Hourwich, Ph.D. Review by Winthrop L. Marvin	367
III. "DID BROAD PROTECTION PAY?" By Roland Ringwalt	376
IV. OBITUARY:	
Major Charles A. Stott (with portrait)	380
Captain Amos Bartlett	381
V. BOOK NOTICE:	
The Blue Book	382

	Page
VI. EDITORIAL AND INDUSTRIAL MISCELLANY	383
The National Election of 1912. By Winthrop L. Marvin	383
Prices of Yarns and Cloths, 1900-1912	387
Wools for the Woolen Trade; Relative Demands of the Combing and Carding Industry in Great Britain . .	388
Wool Clip Changing Character	391
"Handle" in Wool Fabrics	393
British Woolen and Worsted Industry in 1912; Extract from Report of Consul Franklin D. Hale	397
VII. QUARTERLY REPORT OF THE BOSTON WOOL MARKET, JULY, AUGUST AND SEPTEMBER, 1912	399
VIII. IMPORTS OF WOOL AND MANUFACTURES OF WOOL ENTERED FOR CONSUMPTION, YEARS ENDING JUNE 30, 1911 AND 1912	402

BULLETIN

OF THE

National Association of Wool Manufacturers

A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

VOL. XLII.]

BOSTON, MARCH, 1912.

[No. I.]

FORTY-SEVENTH ANNUAL MEETING OF THE ASSOCIATION.

IN connection with the forty-seventh annual meeting of the National Association of Wool Manufacturers, a luncheon was served to the officers and members of the Association at Young's Hotel, Boston, at 1 P.M. on February 7, 1912, and the business meeting followed. Mr. John P. Wood, of Philadelphia, the President of the Association, in his informal address thanked the members of the Association for the honor of reelection, and spoke of the prospect of tariff legislation at the present session of Congress in Washington. The Tariff Board report, he said, had influenced the majority of the National House to hesitate. No progress had been made by the minority of the House in framing an alternative bill, so far as was known. The entirely new basis of levying the raw wool duty, recommended in the Tariff Board report, had increased the difficulty of framing the draft of a new schedule. The country at large did not comprehend how formidable a task this was. The real present task before the manufacturers of the Association was to ascertain what would be proper compensatory duties to conform with the proposed new system of wool duties.

President Wood urged the members of the Association to study with the utmost care the Tariff Board report, or that part of it relating to the branch of the industry in which

they were particularly interested. If any errors of fact or of conclusion could be found they should be communicated to the office of the Association. It was very important, when the subject came up before Congress, to have promptly available all critical comment on the report.

Following President Wood, Mr. Charles H. Harding, Mr. William M. Wood, and Mr. Frederic S. Clark, Vice-presidents of the Association, spoke briefly, and there was a subsequent discussion of various matters by Mr. George F. Willett, Treasurer of the American Felt Company, of Boston, Mr. Joseph R. Grundy, of William H. Grundy & Company, Bristol, Pa., Mr. John Hopewell, of L. C. Chase & Company, of Boston, and Mr. George H. Hodgson, General Manager of the Cleveland Worsted Mills Company, of Cleveland, Ohio.

RE-ELECTION OF OFFICERS.

The Nominating Committee of the Association, composed of Mr. J. F. Maynard, President of the Globe Woolen Company, Utica, N.Y., Mr. Edwin Farnham Greene, Treasurer of the Pacific Mills, of Boston, Mr. Charles W. Leonard, of the Holden-Leonard Company, of Boston, Mr. Thomas Oakes, of Thomas Oakes & Company, Bloomfield, N.J., and Mr. James R. MacColl, Treasurer of the Lorraine Manufacturing Company, Pawtucket, R.I., presented its report through its Chairman, Mr. Maynard, offering this list of officers for re-election :

OFFICERS FOR 1912.

PRESIDENT.

JOHN P. WOOD Philadelphia.

VICE-PRESIDENTS.

CHARLES H. HARDING Philadelphia.

WILLIAM M. WOOD Boston.

FREDERIC S. CLARK No. Billerica, Mass.

SECRETARY AND TREASURER.

WINTHROP L. MARVIN Boston.

EXECUTIVE COMMITTEE.

ANDREW ADIE	Boston.
CHESTER A. BRAMAN	New York.
FREDERIC C. DUMAINE	Boston.
FREDERICK C. FLETCHER	Boston.
JULIUS FORSTMANN	Passaic, N.J.
HENRY A. FRANCIS	Pittsfield, Mass.
LOUIS B. GOODALL	Sanford, Me.
EDWIN FARNHAM GREENE	Boston.
JOSEPH R. GRUNDY	Philadelphia.
FRANKLIN W. HOBBS	Boston.
GEORGE H. HODGSON	Cleveland, Ohio.
JOHN HOPEWELL	Boston.
FERDINAND KUHN	Passaic, N.J.
GEORGE E. KUNHARDT	Lawrence.
CHARLES W. LEONARD	Boston.
JAMES R. MACCOLL	Pawtucket, R.I.
FRANCIS T. MAXWELL	Rockville, Conn.
J. F. MAYNARD	Utica, N.Y.
JOSEPH METCALF	Holyoke, Mass.
THOMAS OAKES	Bloomfield, N.J.
WILLIAM H. SWEATT	Boston.

On the motion of Mr. Maynard, the Secretary was instructed to cast one ballot for the list of officers reported by the Nominating Committee. This was done, and President Wood declared that the gentlemen named in the report of the committee were duly elected officers of the Association for the year 1912.

The report of the Secretary was presented, approved by the Association and ordered to be printed in the Bulletin. The report of the Treasurer was received, accepted and placed on file. The report of the auditor, Mr. Frederic S. Clark, stated that the accounts were properly kept, and that the amount of the balance on deposit was as stated in the report.

REPORT OF THE SECRETARY.

The report of the Secretary covering the year's work was as follows :

To the Members of the National Association of Wool Manufacturers :

As required by the By-laws of the Association, the Secretary herewith submits his report for the year ending with the last day of January, 1912.

The year has been memorable for a determined and almost successful effort of influences hostile to protection, under the guise of mere revision, to force a radical reduction of the wool and woollen duties and other important schedules of the tariff law of the United States. A special session of the Sixty-second Congress, unexpectedly called for the consideration of the futile reciprocity agreement with Canada, gave the enemies of the protective policy a chance to attack the protection system several months earlier than they or the country had anticipated. On June 2, 1911, the Underwood wool and woollen bill, having been duly approved in a caucus of the House majority, was introduced into the House of Representatives and referred to the Committee on Ways and Means. This bill provided for a duty of 20 per cent ad valorem on raw wool, of 40 per cent on cloths and of 45 per cent on dress goods. Allowing for the wool duty, the actual rates on wool manufactures were nearly one-third below those of the ill-starred Gorman-Wilson law of 1894-1897.

The President and Executive Committee of this Association took prompt action to meet this grave peril to the industry. Throughout the discussion of the Underwood bill in the House and Senate, the President and other officers of the Association kept in close touch with the leaders of the protectionist party in order that all desired information relating to actual conditions in the industry might be made available to the public men who were called on to defend it against unjust partisan attack. Final action was had on June 20 on the Underwood bill in the House. It was received in the Senate on the day following, and, by a combination of Demo-

cratic and "insurgent" Republican Senators, the Committee on Finance was instructed to report it back not later than July 10. This indicated that the passage of some tariff reduction measure by the Senate was inevitable, and that the hope of averting serious disaster rested in the President.

The bill was adversely reported to the Senate on June 22, but was not called up for active consideration until a month later, when the Canadian reciprocity agreement had been approved by Congress. Then the House bill was decisively rejected, and a proposal by Senator La Follette, of Wisconsin, was substituted for it. This new measure provided for a duty of 35 per cent ad valorem on all clothing wools, and of 55 per cent on cloths and dress goods. A conference committee of the two houses presented on August 12 a compromise Underwood-La Follette bill in which the duty on all raw wool was set at 29 per cent ad valorem and the duty on cloths, dress goods, etc., at 49 per cent.

This compromise measure was agreed to on August 14 by the House and on August 15 by the Senate. But on August 17, it encountered the veto of President Taft, who condemned the bill as the crude product of inadequate information and as not properly protective. The President insisted that Congress should wait for the full report of the Tariff Board that would be forthcoming in December. "Moderately estimated, 5,000,000 of the American people," said the President in his veto message, "will be injuriously affected by any ill-advised impairment of the wool and woollen industries. Certainly we should proceed prudently in dealing with them upon the basis of ascertained facts rather than hastily and without knowledge to make a reduction of the tariff to satisfy a popular desire, which I fully recognize, for a reduction of duties believed to be excessive." An effort was made to pass the bill over the Executive veto in the House, but it failed of the requisite two-thirds majority.

Three months later, on December 20, 1911, President Taft transmitted to Congress the formal report on Schedule K of the Tariff Board, which has been printed in four volumes. In a special message the President declared that "no legis-

lative body has ever had presented to it a more complete and exhaustive report than this on so difficult and complicated a subject," and he asked that Congress proceed "at once" to a revision of Schedule K in the light of this new official information.

It is understood that the Underwood bill or a similar measure will be reintroduced into the House in a few weeks, and that it will be met there and in the Senate by an alternative bill framed in substantial accord with the Tariff Board report and with sound protectionist principles. Like the past year, therefore, this new year is certain to be one of real interest and importance to this Association and the great industry which it represents.

When the Tariff Board began its important inquiry a year ago, the President and the Executive Committee went on record as urging that all American wool manufacturers should give the Board "full and exact information," and should aid and coöperate in every reasonable way. A careful study of the Tariff Board report has been commended to all our officers and members, and special committees of the Association have been appointed to make a thorough study of the subjects of tops and yarns and of cloths and dress goods, with a view to ascertaining with precision and authority what rates of duty these products may actually need in view of proposed changes in the character and amount of the duties on the raw material. A special Committee on Undervaluations has successfully continued its valuable work.

On February 16 last, at the desire of the new President, an Advisory Committee of seven members was appointed for more frequent meetings and consultation than were possible on the part of the large Executive Committee, which continues to have "immediate charge and administration of the affairs of the Association." All important matters have continued to be referred to the Executive Committee for final determination.

A special committee on comparative American and foreign wages in the wool manufacture has this year conducted a

careful inquiry on behalf of the Association and completed and presented its report.

On April 26 last, by the invitation of a notable group of manufacturers and merchants a reception and banquet in honor of Mr. William Whitman, for forty-one years an active member and for seventeen years the President of the Association, were given at the Hotel Somerset, Boston. At that time the gift was announced on behalf of the Association to Mr. Whitman of a portrait of himself to be painted by Mr. Frederic P. Vinton. The distinguished artist died some weeks later, but the portrait had been practically completed. It was delivered to Mr. Whitman on August 20.

On the initiative of the President and by request of the Executive Committee a great amount of memoranda of present value bearing on varying phases of legislation or the development of the wool and woollen industry is being collected from the records of Congress and the papers of the Association and arranged in a form that will make it most available for prompt reference in future discussions. These systematic memoranda when they are complete will be of great and enduring value to the Association.

The past year has brought again a steady increase in our membership and a material strengthening of our resources. I wish in closing to acknowledge gratefully the active and hearty support which has been given to the Secretary in his work by all the officers and members of the Association, and by my experienced and capable office assistant and statistician, Mr. Battison.

Respectfully submitted,

WINTHROP L. MARVIN,
Secretary.

BOSTON, February 7, 1912.

REPORT OF THE TARIFF BOARD.

SYNOPSIS OF THE FACTS AND SUGGESTIONS CONTAINED IN
THE FOUR VOLUMES.

PRESIDENT TAFT, on December 20, 1911, transmitted to Congress the long-awaited report of the Tariff Board on Schedule K. In the accompanying message the President emphasized the fact that the Board was unanimous in the findings, and that "on the basis of these findings I now recommend that the Congress proceed to a consideration of this schedule with a view to its revision and a general reduction of its rates." The message added: "The findings of the Board show that in this industry the actual manufacturing cost, aside from the question of the price of materials, is much higher in this country than it is abroad; that in the making of yarn and cloth the domestic woolen or worsted manufacturer has in general no advantage in the form of superior machinery or more efficient labor to offset the higher wages paid in this country. The findings show that the cost of turning wool into yarn in this country is about double that in the leading competing country, and that the cost of turning yarn into cloth is somewhat more than double. Under the protective policy a great industry, involving the welfare of hundreds of thousands of people, has been established despite these handicaps." President Taft added that in recommending revision and reduction, "I, therefore, urge that action be taken with these facts in mind, to the end that an important and established industry may not be jeopardized."

Commending the general character of the report, the President said: "I venture to say that no legislative body has ever had presented to it a more complete and exhaustive report than this on so difficult and complicated a subject as the relative costs of wool and woollens the world over. It is a monument to the thoroughness, industry, impartiality, and accuracy of the men engaged in its making. They were

chosen from both political parties, but have allowed no partisan spirit to prompt or control their inquiries. They are unanimous in their findings. I feel sure that after the report has been printed and studied the value of such a compendium of exact knowledge in respect to this schedule of the tariff will convince all of the wisdom of making such a Board permanent in order that it may treat each schedule of the tariff as it has treated this, and then keep its bureau of information up to date with current changes in the economic world."

The official synopsis of the report of the Tariff Board, as presented to Congress, is as follows :

The report consists of five parts :

Part I. Analysis and Glossary of Schedule K in the present tariff act, together with a statistical survey of the woolen industry in leading countries.

Part II. Report on raw wool, production, and shrinkage.

Part III. Report on manufacturing costs.

Part IV. Report on ready-made clothing and wearing apparel.

Part V. Report on wages and efficiency of labor and machinery in the United States.

GLOSSARY.

In Part I. the existing tariff act, as it relates to wool and manufactures of wool, is analyzed paragraph by paragraph. Under each head is a description of the different articles on which duties are levied by the paragraph in question, with a brief explanation of the process of manufacture and the relation of each commodity to the trade ; an analysis in detail of the present duties and method of assessment and reduction of duties to ad valorem terms ; and statistics as to production, imports, and exports of each commodity, together with a section on the relation of the various branches of wool manufactures to raw materials, and an explanation of the origin and theory of compensatory duties. To this is added a statistical section, which shows the character and localiza-

tion of the industry in the leading countries of the world and the movement of the world's commerce in wool and manufactures of wool.

RAW WOOL.

Part II. The report on raw wool covers an extended study of the general conditions surrounding the production of raw wools not only in the United States but in Australasia, South America, the South African Cape, Great Britain, and other countries. Relative costs of production have been developed as closely as possible in the case of the leading clips and comparative shrinkages established of the various important varieties of raw wool in the scouring process.

Special agents have gathered full information as to the expenses attaching to sheep farming and ranching at home and abroad. The investigation was begun in 1910 and covered in the United States 173 counties in 19 States. In all nearly 1,200 woolgrowers were visited by the agents of the Tariff Board. Special agents were sent to Australia and South America, as well as to England and the Continent.

The Board obtained from the books of a large number of mills, both foreign and domestic, the actual yield of clean wool as compared with the grease weights of the more important grades in common use in the woolen and worsted manufacturing industry.

MANUFACTURING COSTS.

Part III., the report on manufacturing costs, includes a study of manufacturing costs in the United States and the leading foreign countries. This section of the report is based upon comprehensive detailed cost figures secured at the mills by the Board and its agents.

In this investigation the number of mills from which properly verified information was obtained was 174, and such information was taken by agents of the Board. These mills are situated in 20 different States. They represent over 46,000 looms, 1,900,000 producing spindles, and 109,000 employees. They are not only representative of the indus-

try, but comprise in looms and employees two-thirds of the productive capacity of the industry in the United States. The cloth-making mills range in size from a 23-loom establishment to one running 2,700 looms. Of the mills making yarn exclusively, the range was from 4,400 spindles to 46,000.

On tops and worsted yarns actual cost figures for a given period of production were obtained, and a detailed analysis made of items of cost by processes. In the case of cloth a collection of samples was made, representing the chief lines of goods in the market, and careful cost computations were made at the mills, from their records, on individual samples.

Detailed cost schedules were prepared by the Board covering each process in manufacturing, and these were filled in by the agents of the Board in consultation with the cost experts of the mill. In all cases a detailed statement was taken of "general expenses" and "fixed charges" for a year's period, together with the total payroll, operating wages for the same period. Overhead expenses were then pro-rated according to the proportion of this labor. These schedules were accompanied by similar schedules covering tops and yarns, which are filled out in the same manner. The report includes detailed returns of this character on 55 different samples. The European work on wages and cost of production extended to England, France, Germany, Austria, and Belgium. Estimates of the cost of production on specific domestic fabrics taken from the United States were secured from various manufacturers in England, Germany, and France, and the weavers' rates of pay per yard of cloth secured for these countries and for Belgium.

Wage scales covering the piece rates paid weavers, spinners, and other classes of labor were secured from all of the countries visited by agents of the Tariff Board, and these are tabulated or otherwise presented in the report.

Rates, wages, output, or production per machine and per operative were secured for weavers, spinners, carders, and many others.

It is believed that this is the first successful attempt to

couple foreign rates of wages and earnings with the real efficiency or speed of work in order to show actual labor costs.

Weavers' rates per yard and the number of yards produced per weaver or per loom are given on all the sample fabrics, and efficiency data furnished for a large amount of other fully described fabrics, showing looms attended, speed of looms, weavers' rates per yard, and yards produced.

READY-MADE CLOTHING.

Part IV. The report on the ready-made clothing industry covers figures representing net annual sales of between \$80,000,000 and \$90,000,000, and some 60 different establishments. The houses visited were in the five leading centers of this manufacture—New York, Chicago, Philadelphia, Rochester, and Baltimore.

The inquiry went into the question of the manufacturer's costs for his business as a whole, and also for typical garments. The chief aim kept in view was to ascertain the importance of the cost of cloth and of other woollen materials in the manufacture of clothing.

This section of the report traces the wool from the back of the sheep to the back of the consumer, showing the relative increase in cost and price at each stage of the process.

WAGES AND EFFICIENCY.

Part V., the report on wages and efficiency of labor and machinery, includes a study of employees in the woollen and worsted industry, covering country of birth, sex and age, rates of wages and earnings, efficiency of employees, and efficiency of machinery, including the proportion of foreign-made machinery used in this country, the age of machines in use, and detailed figures on the variations in labor cost per pound in the manufacture of tops and yarn.

For 11,080 looms there was kept under the direction of representatives of the Board a loom record for each day of the actual time the weavers were operating the looms and

the number of the measured yards of cloth woven during the period for which the record was kept. The speed of each loom and the number of picks per inch in each piece or cut woven of each style number, with weight and complete details of warp and filling yarns, ends, shuttles, and harness were secured for a total of 1,912,681 yards.

FINDINGS OF THE INVESTIGATION.

WOOL COSTS.

The result of the raw-wool investigation establishes the fact that it costs more to grow wool in the United States than in any other country; that the merino wools required in such great volume by our mills are the most expensive of all wools produced; that the highest average cost of production of such wool in the world is in the State of Ohio and contiguous territory; and that the lowest average cost on similar wool is in Australia.

It is not possible to state in exact terms the actual cost of producing a pound of wool considered by itself, for the simple reason that wool is but one of two products of the same operation; that is to say, flocks produce both fleeces and mutton — products entirely dissimilar in character and yet produced as the result of the same expenditure for forage and for labor. The only practical method, therefore, of arriving at the approximate cost of the wool is to treat fleeces as the sole product and charge up against their production the entire receipts from other sources. This method gives an accurate result so far as the profits or losses on flock maintenance are concerned; results which are comparable as between various sheep-growing regions.

In order that results from the different sections and from different countries might be more comparable, the item of interest on investment, which varies from 5 per cent in Australia to 10 per cent in our Western States, was left for consideration in connection with profits. For a similar reason the actual production cost of harvested crops fed to flocks was used instead of the market value of same. On this

account the expense charges shown are materially lower than those commonly quoted in the industry.

Figured in this manner the Board finds:

That after crediting the flock with receipts from all sources other than wool, the latter product, in the case of the fine merino wools of the United States, is going to market with an average charge against it of not less than 12 cents per pound, not including interest on the investment.

That the fine wools of the Ohio region are sold bearing an average charge for production of 19 cents per pound.

That in the States east of the Missouri River wool production is incidental to general farming. Here producers, with the exception of certain named districts, lay more stress upon the output of the mutton than of wool, and in such cases the receipts from the sale of sheep and lambs ordinarily cover the flock expense, leaving the wool for profit. The position of the fine-wool producers, however, not only of the Ohio region, but of the far West, is radically different.

That in the western part of the United States, where about two-thirds of the sheep of the country are to be found, the "fine" and "fine medium" wools carry an average charge of at least 11 cents per pound, interest not included.

That if account is taken of the entire wool production of the country, including both fine and coarse wools, the average charge against the clip is about $9\frac{1}{2}$ cents per pound.

That in South America the corresponding charge is between 4 and 5 cents per pound.

That in New Zealand and on the favorably situated runs of Australia it seems clear that at the present range of values for stock sheep and mutton the receipts from other sources than wool are carrying the total flock expense. So that taking Australasia as a whole it appears that a charge of a very few cents per pound lies against the great clips of that region in the aggregate. While the Board cannot therefore undertake to name an exact figure in that case, it is certain that the Australasian costs at large fall materially below the South American.

That in the western United States the capitalization per head of sheep (exclusive of land) is \$5.30, upon which a gross profit of 6.2 per cent was realized. The interest rate in that region ranges from 8 to 10 per cent per annum.

That the labor, forage, and necessary miscellaneous expense in the western United States exceed \$2 per head per annum as against an estimated cost, covering the same elements of expense, of less than \$1 in Australia and about \$1.15 per head in South America.

The Board finds that the present method of levying the duties upon raw wool is defective in that it operates, by reason of the varying shrinkages of the different kinds of wool, to prevent the importation of many heavy-conditioned sorts which if imported would add substantially to the stock of sound staple available for the manufacture of woolen fabrics.

That there is no valid reason for the discrimination that now exists as between the wools of Class I (merino and cross-bred) and Class II (English, medium and luster), and that these two classes could properly be consolidated.

That the present duty of 33 cents per pound on scoured wool is prohibitive, preventing effectually the importation of clean, low-priced foreign wools of the lower grades that would be exceedingly useful in the manufacture of woollens in this country, and if so used might displace in large measure the cheap substitutes now so frequently employed in that industry. The fact that such cheap wools are of such heavy shrinkage that they cannot be imported in an unscoured state emphasizes all the more the prohibitive character of the present scoured pound duty.

That an ad valorem rate is open to grave difficulties from the point of view of administration and revenue, in the case of a crude, bulky commodity like wool, produced in many remote regions and finding its way into the markets through so many various channels of trade.

That, furthermore, an ad valorem rate would give a high duty per pound when prices are high—that is, when the consumer most needs relief and the producer is most able to

bear competition. With a low price of wool the duty per pound would be low—that is, at the time when the consumer has less need of competing wools and the producer is least able to bear competition.

That the chief objections to the present rate on the grease pound could be met by levying some form of specific duty based on the clean or scoured content of the wool imported.

That the necessary machinery for testing at ports of entry could be installed promptly and cheaply and could be maintained efficiently at small expense.

SHRINKAGES.

The rates of Schedule K are based upon the assumption that wools in the grease shrink an average of $66\frac{2}{3}$ per cent. While it is true that considerable quantities of wool do shrink that amount, the average is well below that figure. Certain very heavy wools grown at the South African Cape and in certain districts of Australia, South America, and the western United States shrink as high as 70 to 75 per cent.

From actual examination of domestic mill records it is found that the average shrinkage of the fine merino wools now being imported into the United States from Australia and South America is about 48 per cent.

Similar wools from the same countries finding their way to European markets shrink considerably more, which fact reflects the exclusion of the heavier conditioned wools from our markets.

That the average shrinkage of our fine western wools is 67 per cent, the average shrinkage for all the wools of that region being 62 per cent.

That the average shrinkage of Ohio and other fine domestic fleeces is 60 per cent.

That the average shrinkage of the lower grade domestic sorts is about 45 per cent.

That the national average shrinkage would fall between 55 per cent and 60 per cent.

That South American crossbred wools now being imported

shrink an average of about 33 per cent and the Australian crossbreds about 30 per cent.

That the Class II (English washed) wools shrink, as a rule, from 18 to 30 per cent.

In this connection it should be borne in mind that the merino and crossbred fleeces now entering our market have been, as a rule, "skirted" or trimmed before shipment, so that their yield of clean wool is higher than would otherwise be the case.

NOILS AND WASTES.

Practically no wool wastes or shoddy are imported under the present rates, which are, in effect, prohibitory. The same duties are applied to wastes of an entirely different character. No comparison as to the cost of production of such products can be made. Noils and wastes are merely by-products of the worsted industry and their values bear, in the main, a certain definite relation to the value of the scoured wool from which they come. The present duties on these products are, in theory, adjusted to the actual rates of duty paid on the scoured content of the wools imported, but are not so adjusted in fact.

For example, the duty on soft wastes is nearly half as high again as the duties levied on the scoured content of wools actually imported under present conditions, and the rate of duty on noils is practically equal to the rate of duty actually paid on the scoured content of imported wool.

RAGS AND SHODDY.

The duties on rags and shoddy are practically prohibitory. The duty on shoddy bears no relation to the cost of manufacture. A much lower duty would equalize the difference in cost of production to the shoddy manufacturer. Shoddy, however, competes with wool and the duty acts as protection to the woolgrower. Although all shoddies except the very finest are of much less value than scoured wool, the present duty is higher than the duty on the scoured content of the wool actually imported. On the other hand, woolen rags are

exported very largely from the United States, and American shoddy is imported into Great Britain in considerable quantities.

WOOL MANUFACTURES.

The present duty practically excludes tops from importation and all yarns except worsted yarns of the greatest fineness and value. The same is true of low-grade and medium cloth for men's wear, with the possible exception of very light-weight goods. A considerable quantity of the fine and expensive fabrics are imported. In the fiscal year 1911 these paid a duty amounting to 94.17 per cent ad valorem. These did not constitute 3 per cent of the total consumption of the United States. Women's dress goods weighing 4 ounces or under per yard are still imported in large quantities, and these paid in 1911 an average duty of 102 per cent.

On fabrics there are two duties — a specific duty levied on weight and an ad valorem duty. The specific duty theoretically compensates the manufacturer for the extra cost of his raw material due to the duty on wool. This compensatory duty is fixed at a point intended to be adequate to compensate the manufacturer using nothing but foreign wool of 66 $\frac{2}{3}$ per cent shrinkage. Practically no wool of such heavy shrinkage is imported under the present tariff duty. Consequently, the specific duty is more than compensatory for manufacturers using wools of lighter shrinkage.

This is true to a much greater extent in the case of fabrics made partly or wholly of shoddy, wool wastes, and cotton. An attempt to adjust the compensatory duty to the character of the material used in the fabric is made by the present tariff act, which fixes the compensatory duty at 33 cents a pound for goods worth not more than 40 cents a yard as against 44 cents per pound for goods worth more than 40 cents a yard. The lower rate, however, for the cheaper goods is equally in excess of the actual compensation needed as is the higher rate on medium goods. The result is that on low-grade goods a specific duty of 33 or 44 cents is sometimes in excess of the total value of the raw material in this

country. Consequently the nominal duty on certain cheap fabrics, if imported — which is impossible under the existing duty — is commonly as high as 150 per cent ad valorem, and in some cases even over 200 per cent.

Much of the objection to the present compensatory duty as giving excessive compensation would be removed by putting the duty on wool on the scoured basis instead of on the grease pound. The compensatory duty in that case could be adjusted to the actual wool content in the case of all-wool goods, at least, and would be entirely independent of the disputed point of grease-wool shrinkages. As in the present act, it could be made proportionately lower for goods containing other materials than wool, by means of a separation according to value.

On cheap and medium grades of cloth for men's and women's wear, excepting light-weight dress goods, the combined specific and ad valorem duties are much in excess of the difference in the cost of production here and abroad.

RELATIVE PRICES.

On the other hand, prices in this country on the fabrics just referred to are not increased by the full amount of the duty. A collection of representative samples was made in England of goods ranging from those which cannot be imported at all to those which are imported continually. These were then matched with a collection of samples of American-made cloths which were fairly comparable, and the mill prices compared for the same date. It is found that on goods entirely excluded the nominal rates of duty would reach an ad valorem rate of 150 or even over 200 per cent, but that the American fabric is actually sold in the market at from only 60 to 80 per cent higher than similar goods sold abroad.

On the sixteen samples of foreign goods, for instance, none of which is imported, the figures are as follows :

Total of foreign prices	\$41.84
Duties which would have been assessed had they been imported	76.90
Foreign price, plus the duty, if imported.....	118.80
Actual domestic price of similar fabrics	69.75

Thus, though the nominal duties on such fabrics are 184 per cent, the actual excess of the domestic price over the foreign price on similar fabrics of this kind is about 67 per cent. This is the result of domestic competition. At the present time the industry in general is on a competitive basis.

Certain specialties may be produced in limited quantities by particular firms which cannot be duplicated successfully by their competitors. This might be the result of secret processes or of some special skill in designing or finishing. This may mean a wide margin of profit per unit of product in individual cases. It should also be noted that even in the case of standard goods the industry is one peculiarly dependent on fashion, and the manufacturer who happens to succeed in anticipating the shifting public demand may sell his goods upon a wide margin over the cost of manufacture and make large profits. Under ordinary circumstances the average manufacturer will find that he can sell a part of his output with a good margin of profit, and that another part, which does not meet the public demand, will have to be sold close to the cost price, or even below.

As to the productive capacity of the country in cloth making to meet the domestic demand, there is at the present time no indication of any lack of adequate equipment. It is true that some years ago a greatly increased demand for worsted fabrics, assisted by the high tariff on worsted goods and their by-products, made the manufacture of such goods very profitable and the investment alluring, but this led to a rapid increase of worsted machinery in this country and the building of great modern mills in rapid succession in various parts of the East. A very considerable part of this increase was due to the inflow of foreign capital and the transfer of experienced cloth manufacturers from other countries. The result has been a great increase in competition.

RELATIVE COSTS.

The cost of manufacturing woolen and worsted yarns and cloth in the United States is much higher than in Europe.

The main elements of cost of production are cost of plant, material, and labor.

The cost of erecting and equipping both woolen and worsted mills is much higher in this country than in England. The cost of erecting and equipping a woolen mill is about 45 per cent greater. The same is true of the weaving department of a worsted mill using American machinery.

The excess in cost in the case of worsted spinning is greater, as most of the machinery is imported. This pays a duty of 45 per cent ad valorem, and to this must be added charges for packing, freight, etc., which makes the foreign machine cost 70 per cent more or over in this country than abroad. Nor does this include the cost of erection, as does the price to the English manufacturer. The same is true of weaving machinery when imported.

The material is increased in price by the duty on raw wool. The manufacturer who imports his wool must pay the full amount of the duty, and this means either additional working capital or an additional interest charge to be paid. Wools grown in the United States are increased in value by the duty, but not by the full extent of the duty.

Wages are much higher in the United States, but wages are, in themselves, no necessary indication of relative cost of production. Frequently it is found that high wages and low labor costs go together. The question at once arises whether the labor in American woolen and worsted manufacturing is more efficient than such labor abroad, or whether by more efficient management or greater speed in machinery the American manufacturer is able to get a larger product per operative in proportion to the difference in wages.

It appears that this particular industry is one in which the high elements of costs in this country are not in general offset by any particular advantage or by any marked superiority in the efficiency of labor. To a certain extent, European countries have the advantage of us in this latter regard. In the centers of the industry abroad there is an adequate supply of labor which has been trained for generations in this one industry. In the United States a considerable por-

tion of the labor is found to be of unskilled immigrants with no previous experience in manufacture; and in certain centers this population is of a very fluctuating kind, and the manufacturer is obliged continually to break in a new set of inexperienced operatives. The American tendency to secure the maximum output is noticeable in some cases, but comparing this country with England, at least, it may be said that the possibilities of speed have been practically reached in the latter country.

So far as worsted spinning is concerned, the best mills in this country seem to be able to operate with fewer operatives per machine, and to get a greater product per operative, than in some European countries, but if this means a sacrifice of quality of product to output it is not really a decrease in cost. Looms in the Bradford district run, on the whole, at a higher rate of speed than do looms in the United States. Furthermore, there is no superiority in American machinery over foreign machinery. As a matter of fact, a large amount of foreign machinery is used in this country, and in the worsted mills covered by the investigation into machine efficiency 87 per cent of all the machinery, from the scouring of raw wool through to the finished yarn, was imported. Only 22.9 per cent of looms were imported.

It may be said, then, that, taking the industry as a whole, the American manufacturer practically has no advantage in efficiency of labor and equipment over his foreign competitor, although this statement is subject to exceptions in the case of particular processes at particular mills. On certain specialties the largest and most efficient American mills are able by skilful organization materially to reduce the difference in cost.

Detailed figures as to relative costs of production are given in Part III. of the report. Roughly summarized, they may be expressed as follows:

TOPS.

The difference in the cost of turning wool into tops in this country and England varies with the quality of the top.

Considering all grades it may be stated that 80 per cent presents a rough approximation of the excess of the American cost over the English. The charges for commission combing in the two countries vary by about 60 per cent. The reason for the divergence of the cost figures from the commission charges is explained in the report.

This, of course, does not mean 80 per cent of the value of the tops, but merely 80 per cent of the conversion cost. The cost of conversion in the case of tops is in any case but a few cents, and but a small fraction of the total value of the product, including material.

WORSTED YARNS.

The cost of producing yarns varies in different countries according to particular qualities and methods. In England the method of frame spinning is the more common, and on the Continent mule spinning. The latter is the more expensive process. Comparing frame spinning in England with frame spinning in the United States — which is the common method here — it may be said that, although there are wide variations in both countries from mill to mill, the conversion cost for the same quality and count of yarns in the United States is about twice that in England. The difference in the cost between the United States and Germany is not so great. This refers to the mere cost of turning tops into yarn, and of course does not mean that the difference in cost is equal to 100 per cent of the foreign selling value. The foreign conversion cost of yarn from tops, except in the case of the finest yarns, is normally less than 20 per cent of the total market value of the yarn. Care should be taken not to confuse the ratio between manufacturing costs and the ratio between total values, including cost of raw material.

RELATIVE COST OF PRODUCING CLOTH FROM YARN.

The difference in manufacturing cost here and abroad of woolen and worsted fabrics varies greatly, according to the character of the fabrics. The main processes included are

weaving, finishing, and dyeing. The figures of the Board show that the cost of turning yarn into cloth in the United States compared with England is all the way from 60 per cent to 170 per cent higher, according to the character of the fabric. For a great variety of fabrics the American conversion cost is from 100 to 150 per cent greater than the English cost. This is further substantiated by the fact that the weaving scales per yard of product in the two countries vary in almost exactly the same proportions. The difference in cost of manufacturing in France and the United States is found to be very close to the difference between England and the United States. On the other hand, the difference in the cost of manufacture in the United States and Germany is somewhat less. Further, it should be pointed out that the statement that the difference in the cost of manufacturing cloth is 100 per cent or more does not mean 100 per cent of the market value of the cloth. It merely means that, given the same yarn, the cost of weaving and finishing in this country is generally somewhat more than double that in England. It is impossible to express this difference in relation to the total value of the product, since the material going into two different articles having the same conversion cost may vary widely in value, while, on the other hand, the material for the production of exactly the same article may vary widely in value at two different periods and the conversion cost remain exactly the same.

METHOD OF ASSESSING DUTIES.

If an ad valorem duty be placed upon raw wool, the duties on manufactures of wool must necessarily be ad valorem duties. If a specific duty should be placed on the scoured content of the raw wool, it would then be possible to levy a specific duty on tops and yarns. The system of specific duties, as is well known, has many advantages for administrative and revenue purposes. It has a further advantage from the point of view of adjusting duties to difference in cost of production at home and abroad. If this policy is to be pursued, the duty can be maintained at a constant and

definite figure corresponding to a definite and constant difference in cost of manufacture. Under an ad valorem system the amount of duty varies with every fluctuation in the market value of the raw material, while the difference in the cost of manufacture remains relatively constant. In the case of yarns, which are fairly well standardized, and where the cost varies in a fairly definite relation to the fineness of the spinning, a scale of specific duties graduated to the different sizes of yarn could be readily arranged and administered.

On the other hand, it is probably impracticable to adopt a purely specific system of duties on woven fabrics. These are not standardized in any way and vary widely in material, in construction, and in conversion costs. No feasible scheme of classifying and describing fabrics in terms corresponding to differences in conversion cost has yet been worked out. Consequently, even if the specific system of duties were adopted for wool and yarn it would be necessary to combine a specific compensatory duty with an ad valorem rate for woven fabrics. There are grave difficulties, however, in attempting to place a flat ad valorem rate on manufactures of this kind. In certain grades of fabrics the value of the material is a very large proportion of the total value and the cost of manufacture relatively small. In the case of expensive and finely finished goods, on the other hand, the cost of material becomes less important and the labor or conversion cost becomes an increasingly large proportion of the cost. The result is that a flat rate adequate to offset the difference in cost of production on the finer goods must be prohibitive on cheaper goods. Conversely, the rate which merely equalizes the difference in cost of production on cheaper goods would be inadequate to equalize the difference in the cost of finer goods. A fair solution seems to be the adoption of a graduated scale under which the ad valorem rate assessed properly on goods of low value should then increase progressively, according to slight increments of value, up to whatever maximum rate should be fixed.

A single specific compensatory duty, if adequate for all-wool goods made from imported wool, would be excessive

for low-grade goods containing cheaper materials. This could be partly offset by a lower ad valorem rate on such goods. Specific compensatory duties could be assessed at two or more rates, according to value.

READY-MADE CLOTHING.

The investigation into the ready-made clothing industry shows that the cloth is the largest single element in the clothing produced and is equal to one-third of the net wholesale selling price. It varies with the grade of clothing produced, being highest relatively in the cheaper garments. The cost of linings is about 5 per cent of the net wholesale selling price. The total cost of cloth and woolen materials, taken as a whole, is equal to about 40 per cent of this price.

In considering the importance of cloth cost to the wearer of clothing it is necessary to bear in mind the margin between wholesale and retail price. The retail price is usually 50 per cent or more above the net wholesale price. On this basis about 25 per cent of the price paid to the retailer goes to the manufacturer of cloth.

Taking the industry as a whole, the cost of material, labor, and all other expense undergone in converting material into finished garments is 80 per cent of the net wholesale selling price of the finished product. Out of this 20 per cent margin between the total manufacturing cost and the manufacturer's net selling price come selling expense, such general expense as cannot be charged directly to manufacturing or selling, and profit. These figures apply particularly to men's clothing, where garments are more standardized and represent costs more easy to secure.

In women's garments the cloth is also the largest single item. In skirts it is equal to 40 per cent of the net wholesale selling price; on most coats equal to between 30 and 35 per cent; on cheap suits it is over 25 per cent; and on more expensive varieties it falls below 20 per cent. To the manufacturer, therefore, cloth is not so important an element of cost in women's clothing as in men's. On the other hand, the labor and manufacturing expense are more important in

women's clothing. The margin remaining to the manufacturer of women's garments over and above the cost of materials and expense of converting them into wearing apparel is somewhat less than in the men's clothing industry, but selling expenses are considerably lower for these establishments.

There is submitted a detailed statement for an actual standard high-grade suit of all-wool cloth, which traces the relation of costs and prices in detail for each process of production from the retail price to the cost of the wool on the farm.

THREE-PIECE SUIT.

Regular wholesale price, \$16.50; retail price, \$23 and up. Cloth, fancy worsted.

CLOTHING MANUFACTURE.

Cost of Stock.

Trimmings: Body lining, \$0.38½ per yard. Sleeve lining, \$0.18 per yard.

Number of yards per suit: (a) Coat, 1.8; (b) pants, 1.35; (c) vest, 0.45; total, 3.6.

Cost of cloth used in suit: (a) Per yard, \$1.328; (b) total, \$4.78.

	Coat.	Pants.	Vest.
Cost of cloth	\$2.390	\$1.793	\$0.597
Cost of trimmings	1.963	.278	.527
Total	\$4.353	\$2.071	\$1.124
Credit waste . . . . .	.024	.018	.006
Total cost of stock	\$4.329	\$2.053	\$1.118
Add freight . . . . .	.025	.019	.006
Total	\$4.354	\$2.072	\$1.124

CONVERSION COST.

	Coat.	Pants.	Vest.	Suit.
Sponging and examining	\$0.040	\$0.030	\$0.010	\$0.080
Cutting . . . . .	.146	.109	.037	.292
Trimming . . . . .	.034	.025	.008	.067
Fitting . . . . .	.055	.010	.030	.095
Operating . . . . .	.380	.255	.188	.823
Basting . . . . .	.318	.035	.060	.413
Finishing . . . . .	.345	.138	.027	.510
Button sewing . . . . .	.037	.040	.023	.100
Buttonholes . . . . .	.130	. . .	.107	.237
Pressing . . . . .	.450	.150	.123	.723
Busbelling . . . . .	.068	.050	.025	.143
Miscellaneous . . . . .	.210	.008	.005	.223
Examining finished product . . . . .	.017	.013	.004	.034
Total manufacturing labor	\$2.230	\$.863	\$.647	\$3.740

SUMMARY.

	Coat.	Pants.	Vest.	Suit.
Total stock cost	\$4.354	\$2.072	\$1.124	\$7.550
Conversion cost	2.230	.863	.647	3.740
General expense distributed to each garment on basis of manufacturing labor in each garment . . . . .	.669	.259	.194	1.122
Total factory cost	\$7.253	\$3.194	\$1.965	\$12.412
Selling expense distributed to each garment on basis of ratio of total selling expense to total value of output				1.908
Final cost (factory cost plus selling expense)				\$14.320

CLOTH MAKING.

Kind of cloth	Fancy worsted suiting.
Number of warp ends to 1 inch	73
Number of picks to 1 inch	61
Width in reed	65½
Width of goods finished	57
Weight of cloth per yard (ounces)	11 $\frac{1}{16}$
Pounds of cloth to 1,000 yards	693¾

COST OF STOCK FOR 1,000 YARDS.

	Kind of Yarn.	Plain Mixed or Colored.	Count of Yarn.	Pounds.	Cost of Yarn per Pound.	Total Cost.
Warp:						
2,144 ends	One half blood.	Twist.	2/40	212	\$1.06	\$224.72
1,848 ends	“ “	Colored.	2/40	182.7	1.06	193.66
152 ends	Silk.	White.	60/2	3.4	3.90	13.26
Total ends, 4,144,	Waste 2¼%			10		10.60
Weft, 61 picks	One-half blood.	Twist.	2/40	175.5	1.06	186.03
	“ “	Colored.	2/40	175.5	1.06	186.03
	Waste 2¼%			8.8		9.33
Total stock				767.9		\$823.63

CONVERSION COST FOR 1,000 YARDS.

Productive or direct labor is the actual labor applied to stock in its conversion, including proportion of wages paid to second hands and subforemen properly chargeable to each department.

Nonproductive or indirect labor is indirect labor employed in department, including overseers, foremen, carriers, etc., but not including general and repair labor, these being provided for under general expense.

Department materials are materials other than stock, used in department; for example, soap for scouring, oil for oiling stock, dyes and chemicals for dyeing, etc.

	Productive or Direct Labor.	Nonpro- ductive or Indirect Labor.	Depart- ment Materials.	Total Cost.
Dressing (including drawing in)	\$10.94	\$1.56	\$6.00	\$18.50
Weaving	122.00	38.00	11.20	171.20
Burling	10.00	1.00		11.00
Mending	28.00	1.00		29.00
Remending and specking, etc.	4.50	.50		5.00
Wet finishing	40.00			40.00
Dry finishing and inspecting	14.00	1.00		15.00
General expense, including sample, labor, and material				152.00
Total conversion cost	\$229.44	\$43.06	\$17.20	\$441.70
Cost of stock				823.63
Net manufacturing cost 1,000 yards,				\$1,265.33

Manufacturing cost per yard \$1.265
 Selling price per yard net, 1.328

YARN MAKING.

Spinning 1,000 Pounds of Worsted Yarn No. 2/40.

Cost of Stock.

Pounds tops required for manufacture of 1,000 pounds yarn. 1,136
 Cost of tops per pound. \$0.77
 Total cost of tops. \$874.72

CONVERSION COST.

	Pounds of Material Entering Each Process.	Productive or Direct Labor.	Nonpro- ductive or Indirect Labor.	Total Cost.
Drawing	1,136	\$20.18	\$1.62	\$21.80
Spinning	1,090	29.31	1.80	31.11
Twisting	1,037	24.54	1.02	25.56
Spooling	1,020	11.37	.75	12.12
Warping on jack spools	1,010	12.51	.75	13.26
General expense				110.08
Total conversion cost		\$97.91	\$5.94	\$213.93
Cost of stock				874.72
				\$1,088.65
Less credit waste (85 pounds, at \$0.37)				31.45
Net manufacturing cost 1,000 pounds				\$1,057.20

Manufacturing cost per pound, \$1.06.

TOP MAKING.

Cost of stock entering manufacture of 1,000 pounds of tops.

	Pounds.	Price Per Pound.	Total Cost.
Raw wool, half-blood Ohio (unwashed)	3,125	\$0.25	\$781.25
Less credit noils and waste	{ 180 50	.32 .17	{ 66.10
Net total			\$715.15

CONVERSION COST 1,000 POUNDS OF TOPS.

	Pounds of Material Entering Each Process.	Productive or Direct Labor.	Non-productive or Indirect Labor.	Department Materials.	Total Cost.
Sorting and blending	3,125				
Scouring	3,125	\$7.22	\$5.18	\$6.56	\$18.96
Carding	1,250	3.37	.61		3.98
Combing	1,200	4.88	1.22	2.60	8.70
General expense					23.82
Total conversion cost		\$15.47	\$7.01	\$9.16	\$55.46
Cost of stock					715.15
Total manufacturing cost 1,000 pounds					\$770.61

Manufacturing cost per pound, \$0.77.

COST OF WOOL IN SAMPLE SUIT.

It is estimated that the half-blood wool grown in the Ohio region during 1910 carried an average flock expense charge of at least 16 cents a pound. This does not include interest on the investment in the sheep; and all profit above bare production cost of the crops fed to the flock is eliminated. For this wool 23 cents a pound was received by the grower. The cost at the mill was 25 cents a pound. The amount of wool required for each yard of cloth going into this suit is 2.7 pounds. As it requires 3.6 yards of cloth to make the suit, the amount of wool in the whole suit would be 9.7 pounds. At a cost of 16 cents per pound, the total cost of raising the wool for this suit would be \$1.55. Out of 25 cents per pound, the price paid by the manufacturer, the woolgrower would receive \$2.23, or a margin of 68 cents.

While the average Ohio flock covered by the Board's investigation, as reported elsewhere, consists of about 200 sheep, shearing an average of 7.6 pounds of wool, the general flock average of the entire State is but 55, and the general shearing average of the State 6.5 pounds per head. Using this as a basis, it appears that at 23 cents per pound selling price there would be a return of \$1.49½ per fleece; the actual cost of which was not less than \$1.04, leaving an apparent profit of 45½ cents per fleece. This indicates that the owner of 55 average sheep of shearing age in the average flock would receive \$25.02 as the proceeds of a year's maintenance.

WAGES AND EFFICIENCY.

The investigation as to wages and efficiency, covering 35,029 persons and 164 separate occupations, shows that the earnings of weavers, based upon actual yardage and piece rates per yard, range from \$6 to \$18 per week, with an average for worsted weavers of \$12.36 for males and \$9.54 for females, and for woolen weavers an average of \$10.63 for males and \$10.54 for females. The weekly earnings are for a week of 55.6 hours, the same as the average hours for the industry in Great Britain.

Of the total of 7,990 scouring, carding, combing, drawing, and spinning machines and 12,337 weaving looms investigated, 78 per cent of all the machines excepting looms, and 87.8 per cent of worsted machinery excepting looms, are of foreign manufacture and 22 per cent of American make. It is asserted by manufacturers that American-made machines cannot produce the desired results. Seventy-seven and one-tenth per cent of the looms in use were made in the United States and 22.9 per cent in foreign countries.

Of the 35,029 employees, 36.5 per cent were born in the United States and 63.5 in foreign countries. Thirty-five and one-tenth per cent of all employees were of the newer immigration from Italy, eastern and southeastern Europe. The supervisory class was made up principally of persons born in the United States, the British Isles, and Germany.

Eighty-three and three-tenths per cent of the total em-

ployees had no previous experience in the woolen or other manufacturing or mechanical industry before going to work in the woolen mills. Fifty and nine-tenths per cent of these had been at school or at home and 32.04 per cent had been employed in agricultural, transportation, trade, domestic service, and other non-manufacturing occupations. About one-sixth (16.6 per cent) had been in the industry less than one year and 53.9 per cent less than five years.

Eighty per cent of loom production on worsteds and 70 per cent on woolens, with 20 per cent of loom stoppages on worsteds and 30 per cent on woolens, while weaving, are the manufacturers' desired standards of efficiency. The individual records kept by the Tariff Board of weavers operating 11,080 looms show that the weavers operating 4.1 per cent of the worsted looms and 2 per cent of the woolen looms attained a productive efficiency of 90 per cent and over. On 24.7 per cent of worsted and 12.9 of woolen looms the efficiency was 80, but less than 90 per cent. On 30.9 per cent of worsted and 21.6 per cent of woolen looms the efficiency was 70, but less than 80 per cent. On 34.1 per cent of worsted and 45.4 per cent of woolen looms the efficiency was 50, but less than 70 per cent. On 6.2 per cent of worsted and 18 per cent of woolen looms the productive efficiency of the weavers fell below 50 per cent.

Seventy per cent of the weavers were born in the United States, Germany, and the British Isles, and 30 per cent in Italy, eastern and southeastern Europe. Two menders and burlers were employed for every four weavers and nine looms, to correct the imperfections in the woven cloth. Two and eighteen one-hundredths per cent of the yardage produced was still imperfect after mending and was sold as seconds.

The productive efficiency per one-man-hour for machine operatives and machines in the scouring, carding, combing, drawing, and spinning departments, with 168 separate labor costs per pound, show wide differences in efficiency and cost, but indicate in general that the lowest labor costs per pound were in mills paying the highest wages.

NATIONAL WOOL GROWERS CONVENTION.

ADDRESSES AT OMAHA ANNUAL MEETING AND DECLARATIONS OF THE PLATFORM.

THE National Wool Growers Association held its Forty-eighth Annual Convention in the city of Omaha, Nebraska, December 14, 15, and 16, 1911. It was well attended by delegates from West and East alike.

Hon. Frank Gooding, Ex-Governor of Idaho, President of the Association, in his annual address voiced the satisfaction of the wool growers with the action of President Taft in vetoing the Underwood-La Follette wool and woolen bill. Twelve new States had been added to the organization, besides many county and local bodies, representing altogether an increase of several thousand new members. The individual membership had increased more than 143 per cent. A monthly magazine known as "The National Wool Grower" had been established. President Gooding explained the work that had been done before the Interstate Commerce Commission for more equitable wool rates on the railroads. The officers of the Association had worked for a revision of Schedule K with a raw wool duty based upon the scoured content of the wool. On this question President Gooding further said:

The question of the revision of Schedule K is squarely before the American people, and this convention should go on record for an honest revision for both the growers and the manufacturers of wool. We must not forget in this great fight that the manufacturers are our customers; that our industry cannot prosper unless we have a home market for our wool, but the revision should be a fair one and an honest one to the producers, the manufacturers and the consumers. The honest difference in the cost of production is all that we should ask. I do not believe that the American people want to destroy the great sheep industry of this country and we should make our fight for a revision based on the report of the Tariff Board. That report may be a disappointment to some of our wool growers. It may not show as large a differ-

ence in the cost of production as some of us believe exists, but if it comes anywhere near the line of reasonableness we should accept it and make a fight for a final settlement of the question. The continuous agitation of Schedule K has done much to paralyze the industry, and if we can have anything like a permanent settlement of the question, we can adjust our business to meet it, so that in the future there will be some stability for the products of our industry.

President Gooding reminded Mr. William J. Bryan and other advocates of free wool that the freight rates by rail from the eleven range States in America are from two to four cents higher per pound on the scoured basis than the rates paid by the foreign flockmasters by sea to lay their products down in the Boston market. There were those who seemed to be under the impression that it is not practicable to grow sheep in this country. Yet it is known to be the healthiest country for sheep in the world. It is true that some of the foreign countries possess some advantages through their climatic conditions, but the greatest disadvantages that the American flockmasters are laboring under is the high price of labor, and everything that goes into the production of a pound of wool or a pound of mutton. If Mr. Bryan would furnish us with labor, and living, and freight rates, and range as cheaply as these things are had by our foreign competitors, we would pay this Government a premium on every head of sheep that is run in America.

President Gooding went on to combat the assertion of enemies of the industry that real woolen clothes were yet beyond the reach of the people. He said :

I am dressed in an all-wool suit of clothes made for this occasion ; it cost me \$50. I selected the best and heaviest cloth that I could find. In fact, it is an unusually heavy winter suit, weighing eighteen ounces to the yard. The suit contains three and one-half yards of cloth and weighs four pounds. It took exactly sixteen pounds of wool in the grease to make this suit of clothes. The average price paid at the railroad station for wool has been $14\frac{3}{4}$ cents per pound for the last two years. This gave to the grower who produced this wool \$2.36 for furnishing all the wool required to

make this suit. In making this wool into yarn and then into cloth a by-product or waste is created. This is the short ends or pieces that work off as the wool is put through the different processes before it comes out in the finished cloth. A careful estimate shows that this waste or by-product that is created in manufacturing this sixteen pounds of wool into cloth is worth 40 cents. The term waste is applied to this by-product, yet it has a high value, for it is used over again in making a cheaper grade of cloth or for flannels that can be used for almost any purpose, so we find that the actual cost of the wool in this suit of clothes is \$1.96. I have carried this investigation still further. Sending a sample of the goods of which this suit is made to a large manufacturer, I was advised that the cloth in this suit was sold on the market by the manufacturer at from \$1.90 to \$2 per yard. Figuring the three and one-half yards at \$2 per yard, we find that this sixteen pounds of wool has cost \$7 when manufactured into cloth ready to be made into a suit of clothes. This \$7 has paid the wool grower for growing the wool, the railroads for hauling the wool, the commission men for selling the wool to the manufacturer, the manufacturer for making it into cloth, and it has also paid the duty on the sixteen pounds of wool that are in this suit and the duty that is given to the manufacturer to protect him against the cheaper labor of foreign countries. Seven dollars, if you please, for all the labor and all the protection in the cloth for this suit of clothes, made of the best wool that is grown on earth! Statistics show that American wools when manufactured into cloth make the strongest and best wearing cloth of any wools in the world. Our own Government has discovered this through practical tests and our army and navy are dressed in woolen clothes made under contract to be all American wools. Let us see who is responsible for the high cost of woolen goods. Seven dollars out of \$50 leaves \$43 that the wholesale merchant and tailor received for their labor for distributing the cloth and making it into a suit of clothes. . . .

Let me say that so far as the wool is concerned there is not a mother in the tenement districts of New York that is so poor but what she can dress her little one in an all-wool suit of clothes made from the best wool that is grown on earth. The American wool grower has rested long enough under the stigma of robbing the American people. We are not responsible for the high cost of woolen goods, and we should begin a campaign of education in every State in the

Union so that the people may know the whole truth, and if woolen goods are any higher than they should be, let the blame fall where it belongs. It is a crime for us to stand idle any longer and allow our industry to be destroyed by the muckraker and the jingo politician.

There were several other excellent addresses before the Omaha Convention. Hon. F. J. Hagenbarth of Spencer, Idaho, spoke ably and interestingly on "Wool Shrinkage." Hon. P. G. Johnston, of Blackfoot, Idaho, spoke on the subject of "Economic Distribution." He cited the experiences of California orange growers in advancing the value of their orange lands from \$300 to \$1,000 an acre, through a process of marketing their product, not indiscriminately but with a measure of regulation that insures to him a fair price and a reasonable profit, and to the consumer a well cared for article of food that costs him no more than before these regulative measures were directed. "Intelligent regulation of the shipment," Mr. Johnston urged, was a remedy for many present evil conditions in the wool growing industry. The National Wool Warehouse, he said, represented a gain to the wool growers in this direction.

Mr. A. J. Knollin, of Chicago, Eastern Vice-President of the Association, spoke on the subject, "What the Sheep Industry Means to the East." The production of wool and mutton on the farms of the East, he said, represented a capital invested of \$194,370,000, and an expenditure for maintenance of \$94,678,000. It was a well-known fact that farms where sheep were kept year after year not only retained their fertility but produced more abundantly every season. President Taft was to be commended in his efforts to protect business affected by the tariff from the uncertainties that have depressed it every presidential election.

Another notable address at the Omaha meeting was the paper of Mr. Jacob F. Brown of the firm of Brown & Adams, wool merchants of Boston, on "Marketing of Wool." The Boston wool market, he said, had been steadily built up year after year by the courage, energy, and integrity of the Boston wool merchants. While in certain years on rising wool

markets they had made good sized profits, it was also true that on falling markets they had lost good money. Taking the business for ten, twenty, thirty, forty or fifty years it was Mr. Brown's opinion that one-quarter of a cent a pound net profit on the domestic wool handled was as much as the Boston wool trade can show. This business, like that of wool growing and manufacturing, was not attractive to capital. Mr. Brown knew that the average profit of the mills, year in and out, was a modest one. If the money employed in the manufacturing of woollen and worsted goods could have been loaned on western farms and stock at rates charged by western banks, the net return would have been larger than it has been, to say nothing of the difference in the risk involved. Mr. Brown said the movement was already well under way in the west toward the general adoption of the four-ply paper twine for the tying up of wool. However, it had not yet been used generally in a proper manner. It did very little good to put a string around a fleece unless the ends of the string are firmly tied together in a hard knot that will not slip. Just tucking the ends under does not amount to anything. The fleece slipped from the twine and broke up, causing a serious loss, for after a lot of wool is graded and then handled, as it is by the buyer, a large amount of locks are left by him and are only worth one-half to two-thirds of the value of the bulk. Wool was a valuable product, but in America it is prepared for market in a very careless manner. There were some wool growers who were careful to prepare their wool well. Their clips were well known to the buyers and always keenly competed for. Wool growers had frequently criticised manufacturers who used and dealers who handled foreign wool, but if they could see the foreign wool that is imported they might wonder why manufacturers used as much domestic wool as they do. Foreign wool, as a rule, was handled with care on the sheep and during and after the shearing. Paint was rarely used. The best wool of Australia, New Zealand and South America was carefully skirted and the fleeces after skirting were carefully rolled. If any twine was used

it was a short piece of very small hard twine; then the different grades were baled separately and carefully, and the bales marked to show the grade or classification. Mr. Brown gave the wool growers this counsel:

Raise the best wool you can by taking good care of your sheep.

Use great care that sheep are thoroughly dry when shearing.

Shear carefully and avoid the necessity of second clips.

Remove all tag locks.

Roll up fleeces with the flesh side out and use a hard glazed twine not larger than one-eighth inch in diameter and tie all ends of the twine in a firm hard knot that will not slip.

Pack ewes, wethers, lambs, bucks, dead and tags separately and mark the bags of each with a different brand.

Shearing pens should be as dry and clean as possible.

Use a platform always. Don't shear on the ground.

Put fleeces in a clean bin or on a clean floor after shearing and keep dry until taken to the packing frame.

Tier the bags after packing on timber; never tier on bare ground.

Cover the bags well and keep the wool dry until put into cars and your responsibility ended.

Put up your wool well, then give the buyers a proper opportunity to examine it. This will not only pay you but will help to raise the standard of American wool, with the result that manufacturers will have a much better opinion of it. The more popular a commodity the keener the competition for it. Competition increases the price to the grower and that is where your pocket-book is benefited.

President Gooding and all of the officers of the National Wool Growers Association were reelected as follows: President, F. R. Gooding; Western Vice-President, George Austin; Eastern Vice-President, A. J. Knollin. The Executive Committee, made up of representatives from the various States, unanimously appointed F. D. Miracle, of Helena, Montana, Treasurer, and also reappointed S. W. McClure, of

Gooding, Idaho, Secretary, with high compliments on his zeal and efficiency.

The resolutions adopted by the Convention were in part as follows:

Resolved, That in line with the economic thought which guided Washington, Hamilton, and Jefferson in the propagation of this government, we favor a proper protection to every American industry based on the difference in cost of production at home and abroad.

Resolved, That we endorse the Tariff Commission idea as the proper medium through which the difference in cost of production of wool at home and abroad can be ascertained and commend President Taft for his stand in vetoing the wool tariff bill before such information was obtained.

Resolved, That inasmuch as the wool trade of the world is satisfactorily conducted in valuing wool upon the scoured basis, we believe it affords the most equitable and satisfactory plan of levying duties. If it is possible to buy and sell wool in this way, we see no reason why the government cannot levy and collect its import duties upon the same basis.

Resolved, That we are unalterably opposed to the levying of a duty based on the grease basis, under present conditions, as applied in the Payne law, and we are arrayed equally against any collection of duties based on the ad valorem system.

Resolved, That we endorse unqualifiedly the specific scoured basis as the only scientific, equitable, and permanent basis on which import duties on wool can be collected, and we favor fair compensatory and protective duties on the manufactures of wool.

Resolved, That we deprecate the principle underlying the creation of the Forest Reserve Law when it recognizes the promotion of the growth of timber and the conservation of water supply as the sole use and purpose of the creation of forest reserves.

Resolved, That we feel and know that the maintenance of a proper food and raiment supply for the American people is equally essential, and we hereby ask our representatives in Congress that an amendment be written into the law which will give proper recognition to the live stock interests which by nature and usage are a part of the forest system of the United States.

Resolved, That the present schedule of rates for grazing sheep on the National Forests is higher than is consistent with the present condition of the industry, and proportionately higher than other classes of live stock, and that if any change be made in such rates that it be a reduction.

Resolved, That the present grazing fee charged by stock yards companies for sheep in transit is excessive and out of proportion to value

received, and the President and Executive Committee are hereby instructed and authorized to use their best efforts to obtain a reduction of the fee charged to a reasonable amount.

Resolved, That we favor and demand the introduction of a bill in Congress providing for the creation of a land commission with sufficient appropriations and with proper powers for an immediate examination, which Commission shall make an extensive classification, and which shall take into account the varying conditions, topographic, climatic and otherwise, that exist in different sections of this broad country, and report back such findings to the President and Congress, together with a bill providing for the disposal of the public unoccupied domain that will be permanent and based on commercial demands and practical usage.

Resolved, That we commend the present efforts of the Department of Agriculture in our behalf in their investigations looking to the development of the breed of sheep, particularly adapted to various sections of the United States.

Resolved, That we further request that the Department extend its activities into the field of wool and institute a technical Wool College in connection with the experiments now being carried on with sheep, and that we further ask that the Secretary of Agriculture shall establish a wool department at various agricultural colleges in different States.

Resolved, That we condemn the practice among wool growers of allowing tags or foreign substances to be packed with their fleeces when shorn; also the practice of using sisal or other injurious twines and the improper dyeing of fleeces.

Resolved, That the President and Executive Committee be and are hereby authorized and empowered to take this matter up with wool dealers and manufacturers with a view of determining a fair premium to be paid for wools sold by flockmasters who have properly prepared their product for the market.

Whereas, The general impression prevailing throughout the public press and in the mind of the consumer is that the producer of wool and mutton is deriving an unjust toll from the consumer of these products.

Resolved, That we hereby demand that the Secretary of Commerce and Labor make an investigation of the facts in the case and submit to Congress a statement showing the distribution of costs in both wool and mutton from the time it leaves the hands of the producer until it is purchased by the consumer.

Resolved, That we commend the efforts of the Executive Committee for their unselfish and successful labors in opposition to the free meat bill introduced in the last session of Congress, and that we are opposed to the introduction of free meat and live stock into the United States by reciprocity or otherwise.

THE MANUFACTURER'S RESPONSIBILITIES.

AN ADDRESS BY MR. FRANKLIN W. HOBBS ON THE RELATION OF THE MANAGER TO STOCKHOLDERS AND OPERATIVES.

BEFORE the Southern New England Textile Club, at the Narragansett Hotel, Providence, on January 20, 1912, Mr. Franklin W. Hobbs, President of the National Association of Cotton Manufacturers, Treasurer of the Arlington Mills, and a member of the Executive Committee of the National Association of Wool Manufacturers, delivered an address on "The Manufacturer; his Responsibilities to Stockholders and Operatives," which has attracted wide attention. Mr. Hobbs's address is published below in full:

MR. PRESIDENT AND GENTLEMEN: It is a great pleasure to me to be here to-day as your guest, and I assure you I appreciate deeply the honor you have thus conferred on me.

I wish to speak this afternoon, very briefly, on "The Manufacturer; his Responsibilities to Stockholders and Operatives." This is a broad subject, I admit, and one well worth long and careful thought, but I hope we may consider with interest and profit a few ideas that suggest themselves.

A corporation is made up of three component parts — the stockholders, the executive or manager, and the operatives. In the old days the popular idea pictured a few wealthy and avaricious stockholders, through the agency of their executive, grinding down and oppressing the operatives in order to extract from them the last dollar that could be added to their ill-gotten gains. Unfortunately, in some minds that picture still holds true.

In the first place let us take up the stockholder and see who and what he really is to-day — no matter who or what he may have been in the past. To-day a stockholder in any corporation is just the plain average citizen who has saved a

little money, and who has invested it in the shares of some corporation, which, for one reason or another, have seemed safe and attractive to him for investment purposes.

STOCKHOLDERS NOT ALL WEALTHY.

Corporations are no longer controlled by a few men of great wealth. The contrary is true. In the last ten years it has been computed that the number of stockholders in the larger corporations in the United States has increased from 226,000 to 872,000, and the number is steadily increasing. The United States Steel Corporation now has over 200,000 stockholders, the American Telephone and Telegraph Company over 40,000, and other corporations in like proportion. This tendency is notable in all corporations together with the universal fact that the number of women stockholders is rapidly increasing. An investigation that I recently made covering 106 cotton mills, all located in New England, supplied the following interesting facts :

Total Capital Stock.....	\$135,601,000
--------------------------	---------------

Stockholders :

Men	15,851
Women	14,650
Trustees.....	5,134

Total.....	35,635
------------	--------

Employees.....	148,350
----------------	---------

It will be noted that 45 per centum of the stockholders are men, 41 per centum are women, 14 per centum are trustees. In other words 55 per centum of all the stockholders are women or trustees, and, judging by the average holdings of such investors in several companies, it is believed that their ownership is in excess of the immense sum of \$75,000,000 par value of stock, which is owned by or held in trust for women and children dependent to the extent of such investment on its dividends for their livelihood.

AVERAGE HOLDINGS SMALL.

In 37 of the 106 companies a majority of the stockholders were women and in 72 of the companies a majority of the stock was owned by women and trustees. The average holding per stockholder is 38 shares of a par value of \$3,800 only, a great contrast to the existing popular opinion that the ownership is in the hands of a few wealthy people. While these companies do not by any means include all the mills, they are representative concerns and the same conditions will be found true in all similar corporations. The textile corporations really give large numbers of people a chance to make individually small investments and in that regard are a great benefit to the community and should be encouraged in all reasonable ways by local, state, and national legislation.

Furthermore, there are represented in the returns a vast army of 148,350 employees, for each one of whom an investment at par value of \$914 has been made in the capital stock of these mills. It seems to me that this fact is an impressive one. In other words, before employment can be given, an investment in par value of capital stock, in round numbers of \$1,000, has been made for every man and woman who is to be employed in a cotton mill or considering the actual replacement value of the mills, the investment requisite before a man or woman can be given work is not \$1,000 but almost \$2,000.

It is only when we study and understand the facts that we realize the very large number of people — stockholders, employees, and others — directly and indirectly dependent on the continued success of these industries. The individual holdings are small and often represent the savings of a lifetime by people, who, by thrift and economy, have accumulated a little money and then invested it in an enterprise, upon whose success their livelihood may depend.

Such then, very briefly, is the situation to-day as to the average stockholders, and it is their interests that are put into the hands of the manager, who acts as trustee for them, a responsibility that is fully appreciated by all conscientious

men, and I assure you, gentlemen, in times of trouble and panic, it is no easy burden to bear.

BEFORE THE FACTORY SYSTEM.

On the other side of the executive stand the operatives, the men and women who actually carry out and execute the ideas and plans he originates, and upon whose skill and loyalty depend the success of the industry. Strangely enough, there has been as much or more misrepresentation about the condition of the operatives as about the stockholders. In this connection the Hon. Carroll D. Wright in a most interesting article on "The Factory as an Element in Civilization," stated, with reference to conditions in England a little over one hundred years ago :

There is something poetic in the idea of the weaver of old England, before the spinning machinery was invented, working at his loom in his cottage, with his family about him, some carding, others spinning the wool or the cotton for the weaver ; and writers and speakers are constantly bewailing the departure of such scenes.

I am well aware that I speak against popular impression, and largely against popular sentiment, when I assert that the factory system in every respect is vastly superior as an element in civilization to the domestic system which preceded it ; that the social and moral influences of the present outshine the social and moral influences of the old.

The domestic laborer's home, instead of being the poetic one, was far from the character poetry has given it. Huddled together in what poetry calls a cottage, and history a hut, the weaver's family lived and worked, without comfort, conveniences, good food, good air, and without much intelligence. Drunkenness and theft of materials made each home the scene of crime and want and disorder. Superstition ruled and envy swayed the workers. If the members of a family endowed with more virtue and intelligence than the common herd tried to so conduct themselves as to secure at least self-respect, they were either abused or ostracized by their neighbors. The ignorance under the old system added to the squalor of the homes under it, and what all these elements failed to produce in making the hut an actual den was faithfully performed in too many instances by the swine of the family.

Let us now turn from that very unpleasant, but literally true, picture of the conditions that surrounded the domestic system of manufacture and consider the conditions under which the operatives in the textile industry work to-day. We find them working in large, clean, well-lighted, well-ventilated rooms, amid healthful surroundings, far better than their homes, and, as a matter of fact, the healthiest places they are ever in.

CONDITIONS FAR BETTER NOW.

You will all agree that Dr. Wright was correct in stating:

The regular order maintained in the factory cures this evil of the old system, and enables the operative to know with reasonable certainty the wages he is to receive the next pay day. His life and habits become more orderly; and he finds, too, that, as he has left the closeness of his home shop for the usual clean and well-lighted factory, he imbibes more freely of the health-giving tonic of the atmosphere. It is commonly supposed that cotton factories are crowded with operatives. From the nature of things, the spinning and weaving room cannot be crowded. The spinning-mules, in their advancing and retreating locomotion, must have five or six times the space to work in that the actual bulk of the mechanism requires; and where the machinery stands, the operative cannot. In the weaving-rooms there can be no crowding of persons. During the agitation for factory legislation in the early part of the last century it was remarked before a committee of the House of Commons "that no part of a cotton-mill is one-tenth part as crowded, or the air in it one-tenth part as impure, as the House of Commons with a moderate attendance of members." This is true to-day. The poorest factory in this country is as good a place to breathe in as Representatives Hall during sessions, or the ordinary school-room. In this respect the new system of labor far surpasses the old.

The laws of Massachusetts, which are in many respects the most advanced in the country, require in the public schools 300 cubic feet of air space per pupil, and ventilation furnishing 30 cubic feet of air per minute per pupil. In the latest spinning mill built by the corporation with which I am con-

nected, there are 3,000 cubic feet of air space per operative and the ventilating system furnishes 50 cubic feet of fresh air per minute per operative — air which is cooled in summer and warmed in winter. You will note that this mill furnishes ten times the space and nearly double the amount of fresh air required by law for our school children. One of our State Medical Inspectors recently told me that, after many years' experience, he would state unhesitatingly it was a fact beyond a question that the hygienic conditions in many Massachusetts mills are better than those in any school-house in the State. And yet there are many well-meaning people, ignorant of the facts, who claim a textile mill is an unhealthy place for men and women to work in! I suggest that our philanthropists and politicians turn their attention for a time to the conditions existing in the homes of the operatives and bring them up to the standard now found in the mills.

WHAT MODERN FACTORIES HAVE DONE.

Time will not permit me to go into details, but let us consider the following facts:

The modern factory has abolished the sweat shop; the regular life and hours have, of necessity, lessened dissipation; there can be no overcrowding from the very nature of the machinery; labor laws have greatly reduced the hours of work; all sorts of devices lessen hard labor: each new machine not only lessens labor but enables men to earn their livings in less time; it was the necessity of our mills that first made possible the development of humidification and cooling of air which now gives comfort to the afflicted in our hospitals; libraries, rest rooms, lunch rooms, and Y.M.C.A. rooms are found everywhere; a higher standard of living exists; the best sanitary and hygienic conditions known are found in the mills. It will be seen, therefore, that the modern factory life does not injure mentally, morally and physically those who are a part of it, but that the contrary is

true, and that the modern factory system has been instrumental in lifting the life of the people to a higher plane.

As to the financial side, you all know what great advances have been made in wages. We have heard a great deal about the increased cost of living, and the statement has frequently been made that, in spite of increased wages, the mill operatives can save nothing, as it is claimed that the cost of living has increased more than the wages. That statement we know to be untrue and the savings banks prove my contention. In this connection I think that you will be interested and surprised to know that to-day in the four leading textile centers in Massachusetts — Fall River, New Bedford, Lowell, and Lawrence — the deposits in the savings banks amount to over \$100,000,000 and the number of depositors is 243,000. Twenty-five years ago the amount on deposit was \$41,000,000 and the number of depositors 108,000. Of course, they are not necessarily all mill workers but, practically speaking, they are dependent on the mills for their welfare, and it is a fact that the people of these cities have been able to lay aside, above their living requirements, \$60,000,000 in the past twenty-five years, and this amount has been saved from the wages paid by the mills.

THE EXECUTIVE AND HIS OBLIGATIONS.

We have considered all too briefly a few facts about the present condition of stockholders and operatives, and now come to the executive, the individual who was believed to be between the "upper and nether mill stones," and who tried to steer his course between "Scylla and Charybdis" — the stockholders and the operatives. Again the old idea is wrong and we find that in enlightened and successful management to-day there is no real antagonism of interests at all. The manager appreciates fully his responsibilities to the stockholders and realizes he is acting as a trustee in their interest, but he none the less appreciates and realizes that in all reasonable ways he must also consider and take care of the interests of the operatives, if the stockholders are to get

what they desire and what he wishes them to have. In this connection a prominent sociologist said :

Gentlemen in charge of factories are the managers of great missionary establishments. In their conduct of them as industrial institutions they must recognize economic laws and conditions. It would be suicidal to take the purely ethical view at the expense of the economic ; but, while recognizing the economic conditions which compel certain actions, I believe there is no great difficulty in recognizing also the ethical relations which ought to exist between employer and employee. These ethical relations are becoming more and more a force in the conduct of industry. Whether the new developments of concentrated industrial interests will lead to a still higher recognition of the ethical forces at work is a question which cannot at present be answered. My own belief is that the future developments of industry will be on this line, and that the relation of the employer and his employees will rest upon a sounder basis than heretofore.

THE VALUE OF "TEAM WORK."

Whether we agree with those sentiments or not I am sure that we all will agree that no enterprise can succeed to-day without coöperation and loyalty in every branch. The stockholders, the operatives and the executive must all work for the common end and all must rise or fall together. That is the spirit of the times and the secret of success. No one can estimate in figures the value of "esprit de corps," or, as it is commonly called, "team work," but it is essential. The executive is the man responsible for that and to bring it about he must select with great care his assistants, each especially fitted for a certain place, and then inspire them with his own energy, enthusiasm, and loyalty, and the same spirit must pass on down to the humblest employee. You all remember that last signal Lord Nelson sent from his famous ship "Victory" as he began the battle of Trafalgar: "England expects every man to do his duty." It may seem a far cry from that great naval battle to the management of a modern textile mill, but we need the same glorious spirit in our business to-day, and can only secure the greatest measure

of success when every man does his duty, no matter what position he may hold.

I have only touched upon a few thoughts in connection with my text, — “The Manufacturer; his Responsibilities to Stockholders and Operatives.” I hope that possibly some of the ideas may have been of interest to you and I shall be glad indeed if in any way the suggestions I have made help to bring about a clearer understanding of the subject. It seems well to call public attention to the great number who have invested in textile shares and to the still greater numbers of operatives who are vitally interested in the success of our industry. It is clear that there should be no antagonism between them. The old cry of war between labor and capital is untrue; capital has much at stake; labor has more; but their interests are identical.

Obituary.

JOHN G. WRIGHT. (*With portrait.*)

WOOL manufacturers and merchants throughout the country were saddened by the news of the death, in his seventieth year on January 31 last, of Mr. John Gordon Wright, of Boston, one of the oldest and most honored members of the Boston wool trade. Mr. Wright had not been in his usual health for several months, but the final illness covered only a few weeks. He had stayed at his post of duty as long as he was able to attend to business, and one of the last tasks upon which he was engaged was the writing of certain recollections of the wool trade and of his views of the beneficial effect of the protective tariff as he had seen it exemplified in his long career.

Mr. Wright was born in Lowell, Mass., on July 29, 1842, a member of a New England family long and actively engaged in manufacturing. He acquired practical knowledge of the wool trade, first in Boston and subsequently in New York. His most important life work began in 1884, when he established the wool house of John G. Wright in Boston. Here his remarkable knowledge of the business and his sagacious judgment as a merchant achieved a very great success. A substantial part of Mr. Wright's business was the importation of Australian wools in which he was an acknowledged authority.

In the larger public and business affairs of Boston Mr. Wright was a man of influence. He was a member of the Boston Chamber of Commerce, the Exchange and the Commercial Clubs, as well as of the Art Club. He gave valuable service to the Home Savings Bank as a director, and served as a trustee of the Episcopal Theological School in Cambridge, of which he was a generous benefactor, the new library building of the school being Mr. Wright's own gift. His philanthropies were many and his friends were legion.

Like the ideal old-time merchant Mr. Wright was a gentleman of cultivated tastes, fond of art, music, and wholesome life out-of-doors. In all his personal relations Mr. Wright was notably gracious and genial. He looked the gentleman he was. His

close personal resemblance to President Taft was so marked that the President once sent him a photograph of himself, with a cordial little note about this resemblance and assurance of the esteem which Mr. Wright reciprocated.

The funeral of Mr. Wright was held at the Church of the Redeemer, Chestnut Hill, on February 3, and out of respect to his memory the Boston wool houses were closed at noon that day, on the request of the directors of the Boston Wool Trade Association.

Mr. Wright had made arrangements to have his important business continued. On the day of his death this announcement, drawn up under his direction, was in the hands of the engraver:

Boston, January 29, 1912.

Mr. John G. Wright begs to announce his retirement from active business as a wool merchant, to take effect November 1, 1912. He has named as his successors, his nephew, Mr. John G. Wright, 2d, and Mr. Howard Atwood, who has been associated with him for many years. They will continue the business under the firm name of John G. Wright & Company. In the meantime, Mr. Atwood will continue the active management of the business as at present.

The arrangement made by Mr. Wright will be faithfully carried out by his successors.

Mr. Wright leaves a widow and a daughter, Lila W., the wife of Mr. Andrew Adie, of Boston, proprietor of the Saxony Worsted Mill, and treasurer of the Silesia Worsted Mills, Inc.

Editorial and Industrial Miscellany.

A GREAT WORK DONE.

THE REPORT OF THE TARIFF BOARD AS LAID BEFORE CONGRESS AND THE COUNTRY.

IN this Bulletin there is published the entire synopsis of the report of the Tariff Board on Schedule K. The report itself covers about 1,200 pages. Part I. contains besides the synopsis a full glossary of Schedule K, with a statistical survey of the wool and woolen industry of the world. The next division, or Part II., is devoted to raw wool, its production and shrinkage; Part III., to manufacturing costs; Part IV., to ready-made clothing, and Part V. to the subject of wages and efficiency of labor and machinery in the United States. Each of the various parts is well indexed, and there is in addition a general index of the whole report. All this is done with skill and precision, indicating that the Board had a good corps of trained and competent subordinates.

The entire report is now under examination by American manufacturers. So far as now appears the work of the Board has been performed with industry and without prejudice. Because of the length and complex character of the report, a more extended review must be postponed until the June issue of the Bulletin. But it may be said that considering the short time available the data presented appear to be of substantial value.

The National Association has urged all of its members to give the report their close and critical attention, studying particularly that part of the report which deals with the branch of the industry in which they may happen to be engaged. Some criticisms and corrections have already been received and doubtless others will be forthcoming. Some of the errors indicated are manifestly due to a lack of time for adequate revision, and some of the conclusions of the report are not such as would be altogether approved by earnest and informed protectionists.

However, so voluminous a work as this cannot be conclusively judged after a few weeks. There must be ample time for critical reading and consideration. The report will unquestionably come

in for a wider reading and examination before Congress and the country later in the year, or next year if efforts for revision and reduction of the wool and woollen tariff are deferred until then. We have no doubt that the Tariff Board will welcome corrections and suggestions that may be presented in good faith by the manufacturers of America.

FOR AMERICAN MADE CLOTHS.

THE ENLIGHTENED EXAMPLE OF THE BOSTON WOOL TRADE ASSOCIATION.

THE new Boston Wool Trade Association has done a sensible thing in declaring at the very outset in favor of a preference for American-made cloths and clothing. The members of this Association are merchants of high standing and influence among their fellowmen, and they promptly confirmed their declaration by organizing an exhibit at their Association rooms in Boston of a large variety of samples of superior American cloths from which patterns for suits could be selected.

Every intelligent man knows that there is a great deal of humbug about "imported" woollen fabrics. A great many of these fabrics are not imported at all; some perhaps from another State, or across a river. Many a woollen manufacturer has had the edifying experience of discovering at his tailor's one of his own cloths described as "imported" and sold for an exalted price, and even now there are mills that are expected to respond to the demand of an important customer to have their products labeled as "made in" England, France, or Germany.

The total output of woollen and worsted fabrics for personal use or wear in the United States in 1909 was valued at \$415,000,000. The total actual imports for that same year, of corresponding woollen or worsted fabrics, including dress goods, were \$14,628,000. Allowing \$25,000,000 as a liberal estimate of the domestic value of these goods, duty paid, the imports represented only about one-seventeenth of the total purchase and use of woollen and worsted fabrics by the American people. Yet, from the insistence with which alleged "imported" fabrics are thrust into one's face in department stores or tailoring establishments, it might be imagined that nothing but foreign goods were kept in stock.

Of course, somebody is being deluded — and sometimes it is doubtless the merchant or the tailor himself. Not many foreign goods can be worn in the United States because not many of these foreign goods, relatively speaking, are imported, either in the form of cloth or in the form of finished garments. The total imports of woolen clothing and apparel in the high water mark year 1909 had a value of only \$1,639,000.

It is not at all necessary to look to Europe for cloths of handsome design and superior workmanship. The chief present importer of English fabrics, who is also a large dealer in American fabrics and perfectly familiar with their characteristics, says :

There are no more expert manufacturers anywhere than the best of those in this country. They are wonderfully quick to catch ideas, to modify, alter, improve, and to meet quickly the ever-changing demands of fashion and fancy. They produce as great a variety of woolen cloths as can be found in the whole of Europe together.

The fine and medium grades of the woolen cloths made here are generally better than those of equal quality to be obtained in any other country. American colors are, as a rule, better, clearer and more lasting than those of similar foreign-made fabrics. The designing talent in America is quite equal to any in Europe.

Men who are seeking something “absolutely exclusive” or unlike anything else can still find it in fabrics, often of fearful and wonderful design, from overseas, but such purchasers as these are and will continue to be the exception and not the rule. Every such action as that of the Boston Wool Trade Association, taken by alert and influential well-to-do men, deals a further quietus to a petty spirit of moss-back colonialism which may have had some justification in 1712 or even in 1812, but has none whatever in this present year of the world.

SENATOR LIPPITT ON PROTECTION.

A NOTABLE REVIEW OF THE TARIFF BEFORE THE SILK ASSOCIATION OF AMERICA.

HON. HENRY F. LIPPITT, Senator from Rhode Island, was the principal speaker at the annual banquet of the Silk Association of America, held at the Hotel Astor, New York, Saturday even-

ing, February 10, 1912. Mr. Lippitt's address has attracted wide attention, because of the potency of his argument and of his conspicuous position as the successor to the seat of Senator Aldrich. Mr. Lippitt said:

The desire to change the tariff seems to be a result of prosperity. Two decades ago, after several years of prosperity, the protective system became the chief political issue and resulted in the election of Cleveland to the Presidency and Democratic control of Congress. The tariff was revised to accord with the views of that party and was accompanied by such an extreme business depression that four years later the Republicans were again put in control of the Government and their theories of protection again enacted into law. How severe the cost of that experiment was many of you probably remember well. It was shared by the entire country. It was felt in both agricultural and manufacturing sections. I know of nothing that more graphically shows its extent than the effect it had on the savings deposits of New England. Let me tell you what that was. In the Democratic years from 1892 to 1897 the savings deposits of all Rhode Island banking institutions increased \$2,097,000. In the five preceding years they increased \$17,800,000. In the following five years they increased \$21,900,000 and in the next five years, ending in 1907, they increased \$28,400,000 — an average increase of \$22,700,000 under adequate protection, an increase of only \$2,097,000 under inadequate protection, and a loss to the wage earners of that little State alone of \$20,600,000 under what was in comparison to what is now proposed a mere threat of free trade. Figured in the same way, the loss to the wage earners of the entire country was the stupendous sum of \$449,000,000.

But the memories of men are short. Since those days another period of prosperity has come. A new generation of voters has come into existence, unfamiliar with the arguments that led to the settlement of this question in the nineties, and again the wisdom of the protective system is being discussed. And it is well that it should be. For in no other way than by its ability to justify itself in the great forum of public discussion can an important national policy be maintained.

This time there is not so much question of the principle of protection. Mr. Underwood, in last week's "Independent," has carefully stated his position and that of those who think as he does. The tariff, he says, has destroyed competition, has enabled capital to obtain undue profits and has established monopolies, and he proposes to "reduce the cost of living by just so much as the profit has been unjust."

A SECTIONAL CAMPAIGN.

That labor has been well employed, that in a general way wages have been twice those paid abroad, is not criticised. But, as happened in the early nineties, prosperity which we all advocate in the abstract is objected to in the concrete, and it is proposed that in some way through tariff changes profits of capital shall be regulated without interfering with the wages of labor, and inspired particularly by the representatives of agricultural districts, insurgent and democratic, the attack has centered upon the woolen and cotton textiles. It is true that the agricultural districts have been enjoying a prosperity they never before knew, that but recently they have been selling their cotton at 15 cents a pound and their wheat at a dollar a bushel. Nevertheless they would like to reduce their cost of living at the expense of the capital engaged in manufacture and particularly textile manufacture. Let us see if this is possible.

Two or three years ago, when this feeling was at its height, the textile industries, particularly the cotton, were at a period of unprecedented prosperity. Various causes had combined to bring this about and the best managed and most fortunate of the mills, particularly in certain limited branches of the industry, were making large profits. Some people with short memories inferred that this was the usual condition of affairs and turned to the tariff as a means of remedying it. It seems to me that time has answered the argument that was then being made.

It is a matter of common knowledge that the prosperity of those days has been supplanted by a depression equally as severe, a depression that has extended to all branches of the textiles in varied degrees, but has particularly affected that particular branch, the manufacture of fine cottons, which was particularly prosperous as represented by the earnings of some mills in New Bedford in that period. Domestic competition has asserted its power. The rush of idle capital to the point where capital was remunerative has had its inevitable effect and at this moment there is no branch of the textile trade whether cotton, woolen or silk, I think it may be safely asserted, that is feeling the pinch more severely than those same heretofore prosperous mills of New Bedford.

THE FACTOR OF HOME COMPETITION.

The unfailing law of domestic competition goes hand in hand with the protectionist's theory of the effects of our American tariff. From the beginning until to-day it has been a controlling force. A hundred and twenty years ago, Congress asked Alexander Hamilton to present his views on this question and when, after a year's consideration of the subject, he presented that masterly report upon manufactures to which the discussions of all the long period since his day have scarcely added a single argument, either for or against it, a tariff policy was put in force

that has continued with slight interruptions to the present moment. Referring in that report to domestic or, as he called it, internal competition, he said, "It reduces the price of the article to the minimum of a reasonable profit on the capital employed. This accords with the reason of the thing and with experience." After more than a century's experience with the practice of protection the story of the last two years in the textile industries shows, I think, that it still "accords with the reason of the thing and with experience." And when the hard times of to-day are over, so that it is possible to see what the average of these lean and fat years is to be, it will be found, as it has repeatedly been found before, that what the textile trade earns for its stockholders is not extreme. There is no mystery or uncertainty about what those earnings are. Tables have been prepared in great detail and repeatedly published showing the earnings of large numbers of the New England textile mills during the last twenty years or so. They show that a return of 6 per cent to 8 per cent is what an investor in those industries may expect.

TARIFF BOARD FACTS.

There has recently been made public in Washington the Tariff Board's report upon the woolen industry. It contains much important information, but nothing more striking than that which proves how domestic competition "accords with the reason of the thing and with experience." Among other things, they investigated the selling prices of woolen cloths abroad and in this country. On sixteen standard fabrics, if the American duty were added to the European prices the board found it would have cost to import them into this country \$118.74, not including freight and other charges. Sixteen corresponding American-made fabrics were actually selling in this city for \$69.75, showing that the cost of these fabrics to the consumer was \$48.99 less than the cost of importation and that the actual percentage by which those prices were increased was not the theoretical 100 per cent or more, which the wool tariff allows, but in practice, controlled by our own competition, in those instances the cost of maintaining two great industries, one agricultural, the growth of wool; one manufacturing, the production of woolen goods, was some 60 per cent.

What this report shows to be true about prices in the woolen industry is, I believe, equally true to-day in cottons. The Tariff Board, it is understood, are shortly to report upon that industry. If they go into this question of comparative prices of cotton fabrics here and abroad, as it is natural to presume they will, I think the country will be surprised to find, under the extreme competitive conditions that exist in that industry to-day, how near to foreign prices many American-made cotton fabrics are being sold. In fact, it may be shown that some of these are actually being sold in New York to-day for a less price than they

can be bought in Manchester. To be sure, they cannot long continue on that basis, for they are being sold not merely without profit, but in many cases at an actual loss. But that this condition could exist at all shows that domestic competition is still here in full force and it is old-fashioned competition reinforced and intensified by new-fashioned efficiency methods.

NO MONOPOLY IN TEXTILES.

Now, about monopolies and trusts. I suppose it is true that if it were possible to combine a great industry into a single or even into a thoroughly harmonious control, the effect of domestic competition might be modified. Whether this has occurred in other industries or not it is manifestly true that no such thing, nor even any approach to any such thing, has occurred in either of the three great textiles. It certainly has not occurred in this important silk industry in which you gentlemen are so largely interested. An increase in the number of silk-making establishments from 483 to 843, as the census report shows occurred during the ten years ending in 1909, is ample evidence that competition has not been done away with in that industry. There is certainly no monopoly in the cotton manufacturing industry whose location stretches from one end to the other of the Atlantic seaboard, in which more than 2,000 separate and distinct establishments are engaged and in which the largest individual establishment controls less than 2 per cent of the total machinery.

The nearest possible approach to it would be in the woolen industry, but even in that case the American Woolen Company, relatively the largest unit in any branch of these three industries, manufactures not to exceed 10 per cent of the total and, even if that could be regarded as having so great a control as unduly to enhance prices, its financial experience is only an additional proof that, whether it could or could not do so, it certainly has not.

In the twelve and one-half years that that company has been in operation its gross sales amounted to \$496,832,719. The dividends received by the capital invested in it were \$23,825,912, or an increase of 4.79 per cent which the public had to pay for woolen cloths over what they would have had to pay if capital had been satisfied with no return at all — certainly not an exorbitant figure.

Just what its cost has been to the ultimate consumer is shown in a very interesting way in the Tariff Board report. That report gives a careful analysis of the cost of a standard suit of clothes made of American goods and selling for \$23 and upwards at retail. It shows that the total cost of the woolen cloth of which it was made was \$4.78. Now if we go a step further than the report goes and assume that this cloth had been made by the American Woolen Company, and had paid its proportion of the 4.79 per cent charge for dividends, we would find that the total returns which the capital engaged in this industry in America

received out of this \$23 suit of clothes was just 23 cents. I do not know how much of that profit Mr. Underwood would consider unjust. It seems very moderate to me. But if his theories are correct that the only results of his tariff changes will be to affect profits and he could save it all he would have reduced the cost of living by just 1 per cent. The real effect of his tariffs, I think, would be either to greatly reduce wages, or more likely to transfer the industry to Europe. Taking all these things into consideration, therefore, I think it is not reasonable to let trust questions affect the settlement of textile tariffs. They are not trust-controlled industries.

NO EXCESSIVE PROFITS.

Now, my friends, there is no new discovery in the facts contained in any of these figures. Indeed, there is nothing new to be said in any argument on the subject of protection. The arguments for and against this great national policy have been laid before the people over and over again, and on every such occasion, from the beginning of the government to the present moment, the final decision has been in favor of that system. But these figures, presented by such an able and impartial tribunal as their report shows the Tariff Board to be, are given an authority and a creditability such as the statements of interested parties, whether domestic manufacturers or foreign importers, cannot always command.

When, therefore, the result of this testimony shows that not over one-half of the maximum possibilities of the tariff in these cases was added to the American price, it proves the existence of an active domestic competition that necessarily reduces textile profits to a fair proportion to that received in other American industries, and when, out of the total price of a \$23 suit of clothes, it shows that the profit is only 23 cents it demonstrates that there is no great profit fund from which in these industries a great slice can be taken to reduce the cost to the consumer.

There are just two sources from which economies might come to enable American-made textile goods to be reduced in price. One is the returns of capital, which I have just been discussing; the other is the wages of labor. I have heard no one make the argument that wages paid in the textile industries are unduly high, that they are disproportionately high to the wages paid in other American industries. It is not conceivable that the working people will continue in these textile industries at rates materially lower than they now receive, unless there is to be a general reduction in the rates of all American labor.

If these statements are true, and I believe that any fair investigation into existing conditions will demonstrate they are, that is, that in those large textile industries competition is as free and untrammelled as it has ever been, that under its influence prices so adjust themselves as to afford on the average but a

reasonable profit, that this process has been in no way interfered with by combination, and that the wages of labor are not excessive, it follows that no such thing is possible, by a manipulation of the tariff, to obtain lower prices for American-made goods under conditions that exist in this country.

It may be possible to so change the textile tariffs in some cases as to reduce the margin of protection that now exists and still retain a protective rate, but that is not a simple thing to do. No method has yet been devised by which a tariff rate would afford exactly the same protection in every case and at all times. Personally, I am in favor of such reductions if they can be made, and I hope they can.

A REVISION IN THE DARK.

The tariff policy of our fathers and grandfathers is now being revised in the dark and by its enemies. No hearings are held. The advice of experts is not sought. Tariff board reports are scoffed at. A Democratic majority of the Ways and Means Committee meets in secret and behind closed doors. Its decisions are driven through the House under the lash of the caucus. In this way the most radical and sectional textile schedules this country has ever seen have been made. In 1894 tariff reformers claimed that our salvation demanded free wool, but they left a 50 per cent protection on woolen goods. To-day they hope to tempt the agricultural vote and put a 29 per cent duty on wool, but will only add 20 per cent for the cloth made from that wool. In forty years there has never been less than 50 per cent protection on these fabrics. Even under present rates some \$23,000,000 are being imported and they admit that \$40,000,000 more will be imported under this new schedule. What it would really be no one knows. Forty million dollars means 10 per cent of the woolen fabrics now being made in this country. That means that one piece in every ten of the goods now made in this country would be made abroad, that one loom out of every ten must stop, that ten operatives out of every hundred must lose their employment.

In cottons, with its exceedingly complex and diversified products, they have abandoned the method of classification developed through half a century of tariff-making under both parties, putting six classes where there are now over two hundred and fifty, have substituted an ad valorem for a specific duty, and reduced a 40 to 50 per cent rate to 15 per cent on three-quarters of the cloth made in this country. Canada, with a 24 per cent duty, labor lower than ours, and machinery quite as good, imports 44.7 per cent of its consumption. If we should get a proportional result our imports would amount to more than \$300,000,000, and nothing prevented that experiment being tried but the veto of President Taft.

These textile industries are too large to be played with. They

affect a great many hundreds of thousands of people and a great many hundreds of millions of capital. Even in a country whose volume of trade is as large as ours, the effect on the general welfare of a disaster to them cannot be lightly thrown aside. Taking the wool growers and the manufacturers of woollens, cottons, and silk, their product contributes as it comes from the mill to-day not far from a billion and a half dollars to our annual turnover. By the time, in its further manufactured state, that product appears upon the retail counter it has at least doubled in value. Three billions of dollars of our annual domestic trade is involved in this issue, and the only practical question that exists is whether or not you want to have those fabrics produced in America, as for more than a hundred years it has been the policy of this country to have them produced, or whether you will see destroyed the great capital that our national policy has encouraged to invest in these industries, whether you will see the skilled worker, who has spent years in acquiring the art upon which his livelihood depends, turned adrift to seek other employment, and buy your textiles abroad. There is no intermediate point. You can have cheaper textiles but you can only have them provided you are willing to take them through the door of the custom house instead of through the door of an American mill.

A BROAD NATIONAL POLICY.

What is done on this matter affects to-morrow's bread. Let the people instead of legislatures elect your senators, adopt the referendum, the initiative, and the recall, and perhaps only our children's children can judge of its wisdom. Make a mistake here and in a month factories close, wealth scatters, and children starve. There are, perhaps, men in this hall who have seen this thing happen, for it did happen only a generation or so ago. We have grown into a large country. The interests of all sections sometimes do not seem alike. These textile manufacturing plants have centered themselves on our eastern seaboard. It is a temptation for people seeking provincial triumphs in other sections to attack the industries of which their audiences are consumers. It brings an easy popularity to misrepresent the facts and claim possibilities of low prices even if they do not exist, but that is neither patriotism nor wisdom. I cannot sympathize with the man who wants protection to preserve the American market for what he sells and asks free trade in what he buys. I cannot sympathize with the demand of a protected New England shoe industry that demands free hides. I cannot sympathize with the representatives of agriculture in the middle West who want to cut textile industries in half and object to a reduction in the duty on wheat. Whatever our policy is to be, let it be the policy of a united nation, foundationed deep in reason, in experience, and facts, not a struggle of sectional selfishness. Let party platforms define it as they may, I believe

in that broad national policy which has been the doctrine of the republican party since its birth in 1856 — the policy of adequate protection — a policy that knows no state or section, that proposes to protect alike the farmer at his plow, the weaver at his loom, the mechanic at his lathe, and the merchant at his desk; that knows no east or west, north or south; and which in the last half century has seen the wealth of this country increase more than one hundred billions of dollars. The production of wealth is the purpose of an economic policy and this policy has accomplished that result. What more could be expected of it? Perhaps, under some other policy, we might have done as well; that we can never know.

Under this policy we have grown and prospered beyond the records of history; we have become the mecca of industrial pilgrims from all the world. We have so varied our industries that our nation is self-sustaining. Our size and independence have so armed our hand for war that our voice can be mighty for peace. When, twenty years ago, we temporarily changed it, our industries languished and the savings of our wage earners disappeared. I confess that I look with astonishment at the temerity of those who dare assume the responsibility of re-trying that expensive experiment.

THE BRADFORD TRADE IN 1911.

A YEAR OF DIFFICULTY.

It would be a pleasure, did space permit, to reproduce the whole of the Annual Review of the Bradford Trade as published in the "Yorkshire Observer." To summarize the report would be difficult and unsatisfactory, for it treats on so many subjects that a summary would at best give an inadequate idea of the conditions surrounding and attending the various lines of activity in this great center of the textile manufacture. Therefore copious extracts relating to the salient points are given, which it is believed will convey a clear idea of difficulties encountered by the trade during the year, the way in which they have been met and the success attending the energetic manufacturers of the Bradford district. The extracts from the Review follow.

In our last annual review of the Bradford trade we wrote that it was natural to expect a decline after two such good years as 1909-10, but it was not very evident why it should come. Unfortunately a decline has to be recorded, and the reasons for it are now plain enough, but there is scarcely one among them that could have been foreseen, much less guarded against twelve

months ago. Industrial disturbances at home culminating in the nearest approach to a general strike that this country has ever experienced, food riots on the Continent occasioned by high prices, a sharp political crisis threatening the financial stability of our largest customer, war in Tripoli, and revolution in China — running through the catalogue of the salient events of the year one is led to marvel, not that there has been a falling away from the piping times of 1910, but that there should have been any trade at all. At the same time, it is easy to exaggerate the extent of the decline in trade, and the temptation to exaggerate is strong in times of increasing difficulty and diminishing profits.

Worsted coating manufacturers have done exceptionally well, and spinners, taking them all round, have not come badly off at all. It is true that in these latter months their order-books have grown lean and a big hole has been made in last year's handsome margins, but against that must be set the compensation of cheaper wool. When wool came down at the beginning of the year their position was so strong that they were able to pocket the whole of the reduction as extra profit, and even yet they are delivering yarns at pence a pound above the rates of the day. Their royal time is over, but altogether the spinners will have made as much profit this year as anybody. Wool men have certainly had a lean year. They have suffered more through mistakes in buying (or should we say selling?) than through a diminished turnover, for a greater quantity of wool has been imported and retained for use in this country than in 1910, and the bulk of it has gone into consumption.

WOOL CONSUMPTION ESTIMATE.

For Twelve Months Ended November (in 1,000 lb.).

	Import Wool Retained.	Home- grown Retained.	Deduct for Export.		Net Balance.
			Tops, etc.*	Yarn.	
1905	340,146	91,932	99,276	45,152	287,659
1906	374,453	103,092	101,213	55,205	321,127
1907	429,386	97,883	103,827	63,522	359,920
1908	411,562	101,485	86,934	57,032	369,081
1909	399,536	79,998	107,667	68,177	303,690
1910	471,832	103,185	110,281	81,780	382,956
1911	477,121	105,343	105,463	78,926	398,075

* In estimating the quantity of raw wool represented in the third column by tops, noils, and waste, the method adopted has been to take the total value of these commodities exported, and by simple rule of three calculation from the total value and quantity of import wool retained for home consumption get the weight of average raw wool that may be assumed to correspond to the

export of tops, etc.; but also, as this valuation includes cost of labor, 10 per cent is deducted on this account to get the net wool.

As regards yarn, the method is to take the total weight of export worsted yarn and woollen yarn (omitting the small "miscellaneous" item), to deduct therefrom the total weight of import weaving yarn, and then translate this net weight of balance into raw wool by doubling it.

The "net balance" column represents the weight of wool left for manufacturing.

Our overseas trade has not this year yielded much ground for satisfaction. A year ago we called attention to the fact that the exports of wool and wool textiles for the eleven months ended November 30 had beaten by some four millions the record established in 1907. It seems incredible, but it is nevertheless a fact that 1911 has actually overtopped by a million pounds the prodigious total of 1910. Examination of the figures, however, reveals what no one in Bradford needs to be told — that computation of the volume of trade on a value basis is apt to be misleading. Reckoned in yards and in pounds, the preponderance is transferred to 1910.

WOOL.

For wool merchants and topmakers the year has been one of great difficulty and of meager returns. In this respect it resembles its predecessor, but if anything it has been worse. The mischief has been that all through the year Bradford has been much the cheapest market in the world. Nearly all the wool bought has been "wrong," and the result has been equally unsatisfactory, whether topmakers elected to sit tight or to sell as they went along in the hope of recouping themselves later. It speaks well for the financial stability of the trade that two such years have been survived without failures, or, at all events, with no failure of any consequence. Of course, there has been a large turnover, and combs have been busy all the year, but in business the test of success is not the quantity of output but the amount of profit made, and it is to be feared that few of the balance-sheets struck on December 31 will bear the application of that test with credit.

The year opened with the assurance of a good consumptive demand, at any rate for some months, but with some uncertainty as to the stability of prices. In the colonies half the clip had already been disposed of, with the result that the appetite of users had lost its keen edge, and it was known that there was going to be quite enough wool to go round, even should consumption continue at the rate at which it was then proceeding.

It was with something like stupefaction that the manipulators of the terminal markets saw the January sales in London open with no more than a 5 to 7½ per cent decline, part of which was speedily recovered. The quick rally was due entirely to the courage of the Yorkshire buyers, who saw that the wool was

worth having at the price, and bought with a will both in London and in the colonies. More ground was regained at the March series, and thereafter values remained fairly steady both for merinos and crossbreds until well into the autumn.

But the interval was not without incident. In the middle of June business was seriously dislocated by a strike among the woolcombing operatives. The dispute lasted three weeks, during which time practically the whole of the combing machinery in the district was at a standstill. Some temporary advantage fell to topmakers who were fortunate enough to hold stocks that were not earmarked, and prices of merinos for spot delivery appreciated to the extent of about a halfpenny. But stocks generally were low at the time, and no advance on spot lots could compensate for the inconvenience caused by the stoppage of production.

To add to the difficulties caused by the woolcombers' stoppage, there was at the same time a strike of seamen and firemen at the East Coast ports, which delayed the shipment of tops and yarns to the continent and occasioned not a little trouble over the equitable adjustment between buyer and seller of extra insurance charges and loss of interest. In August came the brief but catastrophic uprising of the transport workers throughout the length and breadth of the country, and scarcely had that incubus been cast off before the concert of Europe was thrown into harsh discord by the Moroccan imbroglio, and fear of imminent war led in Germany to extensive liquidation of securities and a sharp contraction of credit. Throughout the summer, therefore, confidence was subjected to repeated assaults from one quarter after another. Trade was hampered, and consumption was visibly declining.

This was the situation when the time came to begin the buying of the new clip in Australia. With the prospect of a dwindling trade before them, spinners made up their minds that prices must come down something like 3d. a pound. In September 64's tops were in the neighborhood of 2s. 3d., and by common consent 2s. was fixed upon as the basis upon which the season's trade would have to be done. The Australian sales opened about on a par with Bradford, and then prices began to droop. At the beginning of October topmakers sold at 2s. 1½d. for delivery in the new year, and later at 2s. 1d., at which price a big business was done. With November came a reaction; prices in all the Australian markets began to harden, and Bradford had perforce to follow the lead.

Crossbreds had their best time in the earlier half of the year, when there was a large and steady consumption. All the same, it was a difficult period for topmakers, for the spinners bought heavily when prices were lowest, and afterwards they were in a position to do with the market pretty much as they pleased, picking up cheap lots from weak sellers as opportunity offered, and standing aloof whenever the tone became at all strong.

Towards the middle of the year the demand for 40's and 46's seemed to dry up altogether, and the neglect continued until well into the last quarter. When first the phenomenon was noticed there was scarcely any accounting for it, but it is easy now to see in it a natural corollary of the falling off of the export yarn trade. Latterly crossbreds have been subjected to the same "bearing" influences that have affected merinos, and there can be no doubt that prices have been depressed unduly. The unusually large proportion of carding wools in last season's New Zealand clip was another factor which made for weakness. Had there been anything like a normal American demand during the year the shortage of good, shafty preparing wools would have been felt severely.

MOHAIR.

Turkish Trade.

For mohair merchants the year has been one of exceptional difficulty. In Turkey hair there has not at any time been what could be called a free market, and in Capes importers have never been able to see a margin between prices in Bradford and at Port Elizabeth. The plain truth is that for the time being production has got ahead of consumption, and users know it. Helped by their large stocks, they have held importers at arm's length throughout the year, buying only in dribblets and keeping up a persistent attack upon prices. After a decline of a halfpenny in February, Turkey remained fairly steady until October, when there was a further weakening, and to-day fair average is a penny lower than in January, and the same is true of the best Cape firsts, although for six months out of the twelve best Capes commanded more than the January price. Strong Capes have dragged all the year. They now stand at three-halfpence below the January price, and they have been lower.

At Constantinople the season was unusually late in opening. A severe winter in Asia Minor threw shearing late, and the passage of the wool down country was delayed by damage to the railways caused by heavy rains. The clip included a large proportion of skin, representing the fleeces of animals which had perished during the cold weather, but otherwise the condition was fairly good. Dealers at Constantinople had lofty notions of the prices they ought to get, and it was a long time before any business was done. Eventually about 6,000 bags of fine hair were taken in July, the bulk of which probably went to America. After this dealers were more obstinate than ever, and there was no further big transaction until November, when over 2,000 bags of average fleece changed hands at about a halfpenny down. As before, dealers advanced their prices forthwith, and further business was strangled. Early this month 2,000 bags were sold in Bradford on a basis of 15½d. for fair average, a decline of from a penny to three-halfpence from the top price of the year.

These are the only transactions of any magnitude that have taken place either here or at Constantinople. All else has been merely retail business, and it is estimated that the quantity of mohair still at Constantinople cannot be less than 30,000 bags. Whether dealers unload now or continue to hold, they have almost certainly spoiled their market for next season, for without an expansion of trade much bigger than can reasonably be expected, prices cannot be maintained indefinitely with such large supplies in sight.

The Cape Trade.

In Capes a pretty large business has been done in the finer descriptions. Cape firsts with plenty of quality have been pretty well cleared out, but there is a large accumulation of strong, common firsts, which are nearly unsaleable. In fact the careful discrimination of users between strong and fine firsts has been as marked this year as it was last, if not more so. Between the two qualities there has been a difference of a penny to three-halfpence a pound.

Owing to the absence of a skirt-edging trade and to the small demand for plushes and astrakhans winter hair has not been much in request. It got down to 7½d. at Port Elizabeth at the end of October, at which price a fair quantity was bought speculatively. The price then advanced three-farthings, but it is now back at 8d. A large business has been done in blue hair, more particularly Basutos, but here again the price has fallen a penny to three-halfpence. Basuto hair has undoubtedly improved considerably during the past two years in style and quality, and there has also been an improvement in long blues. In fact, the blue hair that is coming from the Cape now is better than any we have had since the war. Firsts still leave much to be desired. Unfortunately breeders have embraced the short-sighted policy of breeding for quantity to the neglect of quality, and the hair seems to get stronger and coarser every year.

ALPACA.

Business in alpaca has dragged all through the year, partly because of the high price and partly owing to the fact that fashion has demanded colored linings, for which alpaca is no use. In the lining trade mohair has had a decided advantage over alpaca, although mohair itself has been badly hit by the competition of demi-lusters. For the first half of the year, except for a few weeks in February and March, Arequipa fleece stuck steadily at 17¾. Under the pressure of increasing stocks there was a slight easing off in August, which was accentuated in September. By October the price had got down to 15¾d., and in this month a considerable business was done, some 2,300 bales being taken off the market in the course of a week, besides a quantity of

inferiors. Within the last two or three weeks there have been transactions in fleece amounting to over 1,400 bales, and 15½d. has been touched. Imports during the year have amounted to 24,092 bales. Stocks of fleece are less than they were twelve months ago, but inferiors are accumulating.

CAMEL HAIR, VAN MOHAIR, AND CASHMERE.

Camel hair enjoys the distinction of being the only raw material of the trade that has maintained its price in 1911. At 12¼d. to 12½d., it is a farthing to a halfpenny a pound dearer than at the beginning of the year. On the outbreak of the revolution in China supplies were cut off for about a month, but they are now coming forward again. There has been a good trade in camel hair noils, mainly for the Continent, where they are largely used for the making of sweaters and similar knitted garments worn by the devotees of winter sports. Cashmere is within a halfpenny of last year's price, and has not fluctuated more than that amount for the last three years. Van mohair, which is a trade apart from Turkey and Cape, is excessively dear in comparison with the finer qualities.

YARNS.

The worsted spinner is no longer the absolute ruler he was last year and during the early part of this year, and he has to-day to content himself with a more or less reduced margin of profit if he wants to sell. Yet he is far better off than other sections of the trade, such as yarn buyers here and abroad, who have been grievously mistaken in many of their anticipations, or as mohair and alpaca spinners, who have been finding business neither easy nor overprofitable. For mere volume the year stands out as one of the most conspicuous, the quantitative decrease of our exports of specifically local yarns as against last year's record exports amounting to about 6 per cent only. Taking all British hair and wool yarns together the decrease is merely nominal in weight and non-existent in value.

Leaving 1910 out of account, we have to go back to the bumper year of 1899 for a large export figure for worsted yarns, whereas the figure for mohair and alpaca yarns has only been excelled by 1906 and 1907, besides 1910. As far as one can judge from circumstantial evidence, statistics not being given, the home trade has been of at least proportionate dimensions.

YARN EXPORTS.

Woolen, Worsted, and Mohair Yarns.	Eleven Months ended November 30.			
	Quantities.		Value.	
	1910.	1911.	1910.	1911.
	Lb.	Lb.	£	£
Woolen Yarn	3,666,300	5,278,300	345,311	498,432
Worsted Yarn :				
Russia	3,978,900	4,390,700	456,753	513,059
Sweden	1,844,500	1,413,700	198,195	157,479
Norway	1,008,700	1,167,800	97,573	113,753
Denmark	1,949,100	2,020,200	197,548	204,309
Germany	36,104,800	32,996,700	3,318,741	3,153,534
Netherlands.....	1,140,500	875,000	110,277	86,607
Belgium	1,487,900	902,500	137,832	79,785
France	1,805,300	1,428,300	177,791	147,538
United States	58,200	35,300	7,053	5,819
Other Countries ...	9,175,300	9,893,600	931,055	1,029,411
Total.....	58,553,200	55,123,800	5,632,618	5,491,204
Yarn, Alpaca, and Mohair:				
Russia.....	1,579,900	1,414,600	225,334	217,056
Germany.....	11,011,000	10,954,700	1,381,247	1,391,136
Belgium	415,600	399,800	53,707	48,891
France	1,552,000	950,100	187,289	118,044
Other Countries ...	1,411,000	1,229,600	160,683	147,288
Total.	15,969,500	14,948,800	2,008,260	1,922,415
Yarn, Hair, or Wool (unenumerated).	8,149,000	8,940,500	277,755	355,294

The exporters' attention has this year been focussed again on single lusters and twofold 40's worsted yarns, but Botanies of all counts have been a sterling and much more satisfactory counterpart in the home trade, and hosiery yarns, too, have had an excellent year. The success of single 30's demis has induced a number of spinners to take up this branch in competition, and when prices were high and "standard" spinners unable to execute new orders within anything like reasonable time, one or the other of these new qualities succeeded in gaining a foothold by the side of the old-established brands. A single 30's demi, costing 8s. 6d. at the beginning of the year, now stands at 7s. 6d., or 2½d. per pound lower, whereas twofold 40's worsted dropped from 2s. 1d. in January to 1s. 9½d. in December, or 3½d. per pound. Single super lusters have lost some of their

saleableness in recent years, demis giving a softer handle in the piece, and the luster they are short of is imparted to them by the ever-progressing methods of finishers. Botany yarns had a great run during the first half of the year, and then fell off somewhat. Nevertheless, they are still in good request, but in whites more than in colors. Whereas the prices of practically all other yarns have given way more or less appreciably, Botanies, at the close of the year, are worth a penny more than at the outset.

HOSIERY YARNS.

The consumption of hosiery yarns in Leicestershire and elsewhere has been extraordinary, thanks to the popularity of knitted jerseys, caps, wrappers, and the like for sporting men and women, motorists, and the general public. Twofold 32's worsted yarns for the braid trade have been neglected, but for furniture coverings and other purposes they have sold in considerable quantities. As in the case of most yarns, the demand was much keener in the first half of the year than in the second. An ordinary twofold 32's quoted at 1s. 8½d. in January is now to be had at 1s. 6½d. Coating counts came in for a great deal of attention, but the uncommon fineness and long duration of the summer has not been to their advantage. Crewel yarns kept fairly busy all along, and the same may be said of Genappe yarns. Carpet yarns were consumed in enormous weights by the Kidderminster and other trades, a fact which is, no doubt, partly responsible for the comparative dearth of the lower crossbreds.

The course of alpaca and mohair yarns has not been altogether satisfactory. Linings are in no great favor, fashion preferring coats and skirts unlined, and what there is wanted is made as far as possible from demi-lusters. The old and unspecified contracts in single alpaca yarns are rather a drag in the market. A similar state of things prevails in the single mohair trade. Both materials have meanwhile depreciated somewhat in value, and both trades have been equally disappointing.

Cashmere yarns have enjoyed a good average demand. The trend of fashion pointing to soft handling materials, there should be a wider opening for them in the new year. Fancy yarns have not caught on, but are again put into the new patterns in great variety. There has been some little business in loop yarns.

Camel hair yarns in low thick singles have enjoyed an unbroken demand, and, the importation being very limited, the material is not easy to get hold of. Prices for these counts kept remarkably steady throughout the year. Better-class qualities participated to some extent in the run on hosiery goods. In twofold 40's the trade never assumed any great dimensions, although some spinners were temporarily unable to promise delivery for several months. Prices for these twofold 40's

receded from 2s. 5d. to about 2s. 3½d. within the twelve months under review. Low grays for beltings were wanted all the year round and prices were stiffly held. Suitable sorts are now largely used for coat stiffening, in place of horsehair.

Never was the future more difficult to gauge than at the present juncture. Looking at things in general, the prospect is certainly brighter than it has been of late. Labor troubles such as we have gone through are not likely soon to recur in this country, though at the moment of writing things look black enough in Lancashire. We are not so sure about other countries where the high cost of living becomes more and more of a burden and takes away from the purchasing power of the masses. America has quite recently given us some new signs of life, and would soon make its presence felt in the world's markets if the struggle over the tariff were at last settled. When this will be nobody seems to know. It may be any time between now and spring, 1913. Home and colonial markets are decidedly promising, and on the Continent the weakest firms seem to have been weeded out. Politically, all is not well yet on the Continent, but rather better trade reports are to hand, at least from Germany and France, although the prolonged war between Italy and Turkey acts as a check upon business.

PIECES.

In dealing with the piece trade of 1911, one is tempted to declare roundly at the outset that it has been good, and then to make certain qualifications and reservations in order to avert the wrath of those whose experience will not let them call it anything but bad. The difficulty is that the Bradford piece trade nowadays comprises so many trades. Some of them are more or less interdependent; others move on a course of their own, and are related to each other and to the rest only by the broad and general connection that they are concerned with fabrics woven in a loom. There is scarcely a textile fiber suitable for the production of apparel that Bradford does not use, either alone or in combination with other fibers, and scarcely a process of manufacture that Bradford cannot turn to account. This versatility of application and variety of production have been of immense advantage to the town, for when many irons are kept in the fire some of them are bound to be hot. But it makes it almost impossible to frame a generalization about the state of the trade that will obtain the assent of everybody in it. The most that can be done is to consider the various sections in turn, give each its due weight, and strike a balance.

FEATURES OF THE YEAR.

The worsted coating trade, then, has undoubtedly been good — probably never better. Up to a few weeks ago manufacturers of both plain and fancy cloths needed the help of all the commis-

sion looms they could get, and even then were not able to keep up with the orders in hand. Spinners could not send in yarn fast enough, and many orders were lost owing to the impossibility of promising reasonably early delivery. Again, the output of warp-faced cloths for cravenetting — the so-called gaberdines — has been tremendous. At first sight this is not a little surprising taking into account the phenomenal dryness of the summer, but the fact is that these light showerproofs make a garment of more general utility than the mackintosh, and one that does not confess its purpose so obviously. Such a garment will give protection against the rain when needed, and it may be carried to be worn as a protection against the chill air of late summer evenings.

Moreover, originally a garment for men, its serviceableness has now been discovered by women, with the result that not only has the output of the new fabrics increased, but there is a call for greater variety of style. Paramattas for rubber proofing have suffered a corresponding neglect. Cotton poplins and the other heavy makes of cotton done in Bradford have had probably the biggest year on record, and the Bradford method of finishing has more than held its own against the Lancashire method. Mixtures of cotton and artificial silk have also sold in greatly increased quantities, and linings, including Italians and cross-dyes, have had a magnificent year. Nor should it be forgotten that the now fashionable velvets are made in Bradford in large quantities.

So much for the bright side of the picture. Where there is cause for complaint is in connection with the ordinary Bradford dress trade. Here we have to record a reduced output and meager profits, and dress manufacturers who do not combine with their ordinary business one or more of the prosperous side branches referred to above will hold 1911 in anything but affectionate remembrance. Paradoxical as it may seem, one of the chief reasons why the dress trade has not been good is that the summer was too fine for it. As a general rule fine weather means prosperous trade, but when there comes such a long and uninterrupted spell of it as we had last summer an undue advantage is given to cottons and linens, and worsteds and mohairs suffer. Here again comes in the difficulty of generalizing about the trade. While dress goods manufacturers have not done at all well, home trade merchants have had quite a normal year, for if they have not been selling dress goods they have been selling coatings and coating serges, cottons, and artificial silks. Another thing that has militated against trade, affecting coatings as well as stuffs, is the skimpy remnant that nowadays suffices for a woman's skirt. When it is considered that makers-up can cut a costume out of three and three-quarter yards of 54-inch cloth, where a few years ago the quantity required was nearer six yards, it will be seen that the falling off in output must be considerable.

The reversible mantle cloths, which originated in Batley and the Colne Valley, are already being tentatively tried in worsteds, and some are of opinion that next year will see them well established. In dress weights they are being made in satin cloths and serges. Makers-up take kindly to them because there are no linings to put in, and to that extent work is simplified. Their disadvantage as a worsted cloth is that they are rather expensive, for being a double cloth they cost nearly double money.

WORSTED COATINGS.

As regards worsted coatings, the feature of the year has been the great demand for blues, not only for the men's wear trade, but for the costume and dress trades as well. Dyed fancies have done well both for the home-trade and the Continent. The fine summer led to a large sale of light-weight fancy suitings and flannels. The passing of the frock and morning coat is affecting the sale of trouserings, although striped cloths have had a fairly good run this year. The trade in fancy vestings has not been large, but there were indications last summer that a fancy waistcoat with a lounge suit may yet be fashionable wear. Orders for mixtures and fancies for the overcoating trade have been smaller than usual, partly on account of the fine summer and partly on account of the competition of cravenetted cloths.

Uncertainty regarding the nature and extent of the expected revision of the tariff has paralyzed the United States trade, which has dwindled to about half of last year's total, miserable as that was. Canada has bought cautiously throughout the year, but Australia and New Zealand have been good customers. A slight decrease in the exports of piece goods to South Africa has been more than compensated for by larger exports of ready-made clothing. South Africa is easily first among the markets for ready-mades, the reason being that the scarcity of female labor is against the establishment of a clothing industry on the spot. Of the Continental markets Germany has done the best, but for the last few months business with the Continent generally has been on the decline.

WOOLENS.

A Busy Year in Leeds.

The story of the woolen trade for the year that is drawing to a close is, on the whole, uneventful, which is only another way of saying that the year has been prosperous. It is quite true that many manufacturers would say that although the output has been heavy, even exceptionally so, still the margin of profit has not by any means been in keeping with the volume of business done. "We were making quite as much money in the old days when we turned out far less stuff than we do now," is a statement that most producers would make if questioned on the

subject. The woollen trade is not alone in this respect, and the same thing would apply with equal force to all our great industries. The business motto of to-day is apparently "Large turnover and small profit," which, of course, means more work, but no increase of pay. The fat profits of the last century seem gone forever, such is the force of competition. But is there not reason for congratulation that we more than hold our own in spite of the fierce fight for business, brought about by the fact that nations which were once customers are now competitors with us in the world's markets? We have frequently been told by people who pretended to know all about it, that the British woollen trade was doomed, and would soon be snapped up by the foreigners. But this thing is not yet.

During the past year the output both on home and foreign account must have exceeded all records. The year opened well. In January there was a strong demand for all fabrics produced in this area. Fancy tweeds were easily the leading lines, and these were followed by blue serges, which never quite go out of fashion. Fancy tweeds attained great popularity, and it would seem that the high-water mark has not yet been reached, as at the moment of writing the orders for these goods are as numerous as ever. It is now quite certain that they will be as fashionable as ever during the coming spring and summer. Makers of some of the leading lines must have had an exceptional run of prosperity. These remarks would also apply with equal force to costume cloths. Throughout the year the demand has been very active, and manufacturers have been much behind with delivery. A steady trade has also been done in serges, but the demand has not been nearly so brisk as in the case of tweeds.

Heavy Overcoats.

There were those who said a few years ago that woollen overcoats had died a natural death, having been ousted by rainproof and waterproof fabrics. It seemed for a while as if this statement were justified by facts. Many people thought that we would never see again in wear the long, heavy overcoat of the once popular "Ulster" and "Munster" pattern. But it is with us to-day almost as large as ever it was. This revival has, needless to say, been a welcome thing to woollen manufacturers. The fashionable overcoat of to-day is long, loose-fitting, and double-breasted, and it stands for the consumption of vast quantities of tweeds. Fashion demands that it must be made of tweeds and nothing else.

There has also been a boom in certain materials for women's wear, chiefly for reversible tweeds for jackets. Makers of these fabrics have been busy for some time past, and up to the present the demand shows no signs of falling off. These reversible tweeds are wanted in heather mixtures, and some of the designs now on the market are very effective. This remarkable run upon

heavy tweeds, both for men's and women's wear, is likely to continue. All the distributing houses, the wholesale clothiers, and mantle manufacturers are wanting more, and although the season is so far advanced makers are still working at high pressure.

The Shipping Trade.

A feature of the year's trading has been the remarkable steadiness of the overseas demand for West Riding fabrics. The colonies have taken larger parcels, and an increasing business has been done with the Continent and the smaller outlets in the far East. South America has been a steady customer, and British-made woollens are becoming more and more appreciated in all the Latin Republics. The war cloud which hung over Europe when the Franco-German "conversations" were taking place had a bad effect as far as shipments to the Continent were concerned. Both French and German orders were cancelled, and for some time at least business moved very slowly. The stagnation, however, was only temporary, as when the crisis ended the normal value of shipments was soon reestablished. This was the only interference with the run of business throughout the year. There can be no doubt that British styles in men's wear are becoming more and more fashionable each succeeding year amongst foreign nations, and this, of course, makes itself felt in a greater demand for British woollens and worsteds.

The prospects of the shipping branch for the coming season are considered excellent. Some oversea operators have been holding back their orders in the hope that they might be able to place them on more satisfactory terms later on. These hopes have not been realized, as, in face of the position in the raw material market, no decline in the price of the finished article is at all likely to take place in the near future. Buyers now seem to be realizing this and are operating freely.

LETTER FROM GEO. C. HETZEL TO HON. OSCAR W. UNDERWOOD.

CHESTER, PA., December 29, 1911.

HON. OSCAR W. UNDERWOOD, *Washington, D.C.* :

DEAR SIR: On pages No. 2348 and No. 2349 of the Congressional Record of the first session of the Sixty-Second Congress, appears the following :

MR. MONDELL. — The great bulk of our fine wool, as the gentleman knows, shrinks about 65 per cent.

MR. UNDERWOOD. — Yes ; that is, all your western wools.

Mr. MONDELL. — That is true of the territorial and the fine merino wools.

Mr. UNDERWOOD. — That is true of the western wools, but the wools of Ohio do not shrink as much as 65 per cent and very few of the imported wools shrink 65 per cent.

Mr. LONGWORTH. — Will the gentleman permit me ?

Mr. UNDERWOOD. — Yes.

Mr. LONGWORTH. — If the gentleman will permit, I would like to call his attention to his own report, wherein he states that the shrinkage in Ohio wool is 51 per cent. That is the average shrinkage, of course.

Mr. UNDERWOOD. — Yes ; the average. And I will say to the gentleman from Ohio that although his wool shrinks only 51 per cent or, say, 50 per cent in round numbers, 2 pounds of raw wool are necessary to make 1 pound of cloth, according to his own statement with respect to the wool from his own State ; and when the gentleman from Ohio participated in writing Schedule K of the Payne tariff bill he gave to the woolen manufacturers a protection of 4 pounds of wool instead of 2 pounds ; he levied a tax on the American people of 11 cents a pound on 4 pounds of wool instead of 11 cents a pound on 2 pounds of wool, as compensation to the American manufacturer, and allowed the American manufacturer to put 22 cents a pound in his pocket, deceiving the American people to that extent.

On page No. 2351 appears the following :

Mr. UTTER. — I understand the gentleman to say that the bill has been framed for the purpose of securing revenue ?

Mr. UNDERWOOD. — Certainly.

Mr. UTTER. — Therefore, in fixing the ad valorem duty, I ask on what you have based the duty to come from, either from less imports or larger imports than at present ?

Mr. UNDERWOOD. — Larger imports. If the gentleman will examine the report, the fact will appear very clearly.

Mr. UTTER. — Larger imports mean less home manufactures.

Mr. UNDERWOOD. — Not necessarily less home manufactures, because the country is growing.

Mr. HUGHES (of New Jersey). — Some people will wear two pairs of shoes instead of one, for example.

Mr. UNDERWOOD. — I will answer the gentleman and say that no man in this country is entitled to a monopoly. Does the gentleman agree with me ?

Mr. UTTER. — We all agree on that ; oh, yes.

Mr. UNDERWOOD. — And no industry in this country is entitled to a monopoly. Does the gentleman agree on that ?

Mr. UTTER. — We all agree on that ; yes.

Mr. UNDERWOOD. — That no combination of industries in this

country is entitled to a monopoly, whereby it can put burdens on the American people?

Mr. UTTER. — That is correct.

Mr. UNDERWOOD. — If we all agree on that, I say that this combination of woolen industries has had a monopoly of the woolen business in this country for many years. . . . Now, in this consumption of goods under Schedule K, valued at \$530,863,000, there were only \$18,102,000 worth of imports. The importations amounted to only 3.4 per cent of the American consumption of woolen goods. Was that a monopoly for the American manufacturer?

Mr. UTTER. — A monopoly for the American people, but not, perhaps, a monopoly for the American manufacturer.

Mr. UNDERWOOD. — Not a monopoly for the American manufacturer! My friend, if you had a grocery business in your town, and by law had control of 96 per cent of the groceries sold in that town, while outside competition could only bring in 4 per cent to compete with you, would you have a monopoly?

Mr. UTTER. — If we had 100 groceries in that town we would not have a monopoly for any individual grocer, but we would have the protection of our home market for the home man.

Mr. UNDERWOOD. — But you would have a monopoly for the industry; and, more than that, there is nobody in this country who does not know that the American Woolen Company to-day fixes the price of woolen goods; that it is a monopoly; that it is a trust; and that this industry and that company dictated to a Republican House, prohibiting you from reducing the exorbitant rates under Schedule K in the last Congress. (Applause on the Democratic side.)

Query: Why was the investigation of the American Woolen Company authorized under House resolution No. 147 at the extra session dropped so suddenly; nay, never commenced?

The elder statesmen evidently concluded that a serviceable lie is sometimes too valuable a political asset to risk in the crucible of public inquiry.

In a speech made by you before the Industrial Club of Chicago, several months ago, you had this to say concerning the effect of the duty on woolen goods:

The price of the corresponding or competing American fabric is increased in price by the amount of the duty, as is known to be the case and it is inevitable.

That whole speech inspires the thought that if it were possible for some of you lawyers and armchair economists to get a

little practical experience in the wool manufacturing business, you would subsequently be highly entertained if you listened to phonographic records of what you had previously said about efficiency, averages, profits, monopolies, etc., — and you would marvel at the temerity of unsophistication.

However, it is very evident from the foregoing quotations and other more recent statements made by you, that it is your firm belief that, under the shelter of the duty on woolen goods, the American manufacturers obtain a profit which is invariably the difference between the domestic cost of production and the foreign price with the duty added.

An experience of about twenty-five years in the manufacture of worsted goods warrants me in stating with absolute confidence these facts :

1. There never has been and there is not now anything even remotely approaching a monopoly in the manufacture of woollens. On the contrary there is free, open, unrestricted, keen domestic competition.

2. The wage-earners employed in wool manufacture are paid twice to four times the wages obtainable anywhere else in the world for the same service.

3. American woolen goods are sold at cost with only a reasonable profit added, irrespective of whether they be high price goods worn by the rich or low price goods worn by the poor.

4. The profit is fixed by intense domestic competition, just as it is in other lines of industry, and is never based upon the import duty on corresponding foreign fabrics.

5. Specifically, I am quite certain that the cloth manufacturers' average net profit does not add as much as 40 cents to the cost of a suit of clothes.

The foregoing five propositions state the true facts and they are antagonistic to what you and your allies teach. Should you question them and possess the courage to risk the consequences, the opportunity and the power to disprove them are in your hands.

The approaching Presidential campaign will probably be fought on the tariff issue and, as usual, the woolen schedule will be the center of attack. It is therefore important that the people shall know the truth and know it in time, so that they shall not again be fooled by the fallacious arguments and deliberate misrepresentations of 1892 which are being reemployed to-day upon a new

generation of unconscious victims of political opportunists. Those who are old enough to remember the Democratic Wilson Tariff with its silent mills, its great army of unemployed and its soup-houses, need no warning.

How much does the woolen manufacturers' profit add to the cost of a suit of clothes? That is what the public wants to know and that is the meat of the whole question.

I therefore challenge you to offer in Congress a resolution, or other necessary legislative device, directing either the Tariff Board or other competent, disinterested experts, to *ascertain the average net profit per yard earned by the woolen and worsted cloth manufacturers during the years the alleged "indefensible" Schedule K of the Payne-Aldrich Tariff bill has been in force.*

This investigation will show, I am sure, that the 96.6 per cent of home-made goods, representing the product of about nine hundred American manufacturers (which you call a monopoly !!) are sold at only a fair profit above cost, *and therefore at prices considerably below the duty paid value of corresponding foreign goods.*

It will then not longer avail to employ the common and venerable trick of reducing a compound duty to an ad valorem equivalent of 200 per cent or more (which nobody ever pays on goods which nobody ever imports) and then melodramatically invoke high heaven to witness such iniquity. That method of deception will be dead.

You will then realize that you and your party will be in a very awkward position.

You cannot, in fairness, deny the right of the manufacturer to a reasonable profit and you would not dare demand a reduction in wages in order to lower the cost of goods. Such a demand would cost the Democratic party not only the votes of the wage-earners engaged in wool manufacture, but the votes of prospective victims employed in all industries affected by the other tariff schedules marked for slaughter in your program of a tariff for revenue only.

There would be a repetition of what happened in 1896 when the people "woke up" after having been put to sleep in 1892.

The experience of these four years taught them effectually that low commodity prices without the wherewithal to purchase are less desirable than steady employment at good wages, even if accompanied by high prices.

A protective tariff conserves the American market for the American producers (employer and employed) who rightfully have the first claim on it.

Domestic competition keeps down the price.

You unwittingly paid the finest possible tribute to the Republican Tariff when you called attention to the fact that 96.6 per cent of the American consumption of woolen goods are manufactured in American mills by our own people. That exhibit justifies Henry Clay's designation of a protective tariff as "the American policy."

In an authorized interview which appeared in the "New York World" of the 3d inst. you stated:

There is an effort now being made to develop foreign trade, and I think that one of the most important questions that confronts the American people to-day is the development of markets abroad, so as to assure the consumption of our surplus production, in order that we may keep our mills and factories running all the time, even when our home market is passing through periods of business depression. To accomplish this result, it is necessary first of all to lower the Tariff wall that the Republican party has maintained, in order that foreign nations may trade with us on reciprocal lines. Trade breeds trade, and we cannot expect to develop our own trade abroad if we do not invite other nations to trade with us.

Do you not know that the only way under the sun to win foreign markets for our products is to sell them as cheap, or cheaper, than they are now being sold in those markets? Lowering the Tariff wall will not do it; on the contrary it will throw our own market, the best market in all the world, into the hands of aliens and it would remain in their hands until we were able to reduce the wages of our work people and other items of production cost, to or below the cost level of the foreign invaders.

The Democratic party would be wiped off the map long before the necessary cost reduction could be effected, and all you would have for your pains would be the remorseful knowledge that you had brought unnecessary distress to the people least able to bear it, in a vain effort to make a silly theory do the work of sound and tried common sense.

The American standard of wages is adjusted to a high protective tariff and the American standard of living is adjusted to our high wage-scale. A lowering of that standard will mean political

annihilation to the party responsible for it. You are again respectfully referred to 1896 as an illustration and a warning.

It is true that in your speech before the Southern Society of New York on the 16th inst. you stated that you "are not in favor of free trade conditions or of being so radical as to injure legitimate business," but that sentiment does not harmonize with your deeds, for there is not the shadow of a doubt that the wool tariff bill you fathered would have done irreparable injury to both wool growing and wool manufacturing had it become a law.

There would have been no comfort in the assurance that your sentiments were benevolent.

One of Lord Byron's characters was "the mildest mannered man that ever scuttled ship or cut a throat."

Every effort to secure foreign markets for those products of factory or farm which we are able to export with benefit to ourselves is commendable, but our first duty is to safeguard our own market. "An acre in Middlesex is better than a principality in Utopia."

Trade does not breed trade; the only thing that breeds trade is price. Trade is not carried on between nations, as such, but between individuals, and there is nothing reciprocal about it except the mutual assurance of buyer and seller of a satisfactory bargain. You can't sell American wheat to an Englishman because some other Englishman has sold British woolen goods to an American merchant, nor sell an Indiana plow to a German farmer because some Nuremburg manufacturer has sold mechanical toys to a New York storekeeper.

Each transaction stands on its own feet. Quality being equal the lowest price secures the business — there is no sentiment about it, nor patriotism, nor reciprocity. These things are axiomatic in the kindergarten of real business.

According to your figures we buy from Europe only 3.4 per cent of the woolen goods we consume, but that fact does not hinder Europe from buying our exportable products of industry to the value of hundreds of millions of dollars in excess of what we purchase. Europe would not buy any less from us if her merchants and manufacturers didn't sell us a dollar's worth of woolens.

Since the foregoing was written the Tariff Board's preliminary report has been published.

Every one of the five propositions stated herein is thereby confirmed except the average net profit per yard of the cloth manufacturers of the country.

That item is up to you.

With all these Tariff Board facts abundantly testifying that duties which are absolutely prohibitory work no harm to the consumer, it is unthinkable that any patriotic citizen of any party would be willing to reduce the duty on woolen goods to a point that will invite foreign competition.

You have shown that 96 per cent of the goods we consume are made at home. Those who import the remaining 4 per cent do so to meet the demand of that portion of our people who, for high novelties, exclusive patterns or (mostly) because of a prejudice for things that are "foreign," are willing to pay any price.

Such importations are really luxuries and it is proper that they be taxed as such.

The people who buy them are willing and able to pay for this preference and would buy them just the same if the duty were twice as high — hence such duties really become revenue duties.

Yours truly,

GEO. C. HETZEL.

THE WOOL MANUFACTURE IN AUSTRALIA.

THE "Wool Record," of Bradford, England, in a recent issue calls attention to the growth of the wool manufacture in Australia; a country which until recently has paid comparatively little attention to that side of the wool industry. According to recent information,¹ about 18,000,000 pounds of wool were retained in Australia for local consumption. This is about 2.2 per cent of the last year's clip; not a very large quantity it is true, but it is an indication of what may be expected when the advantages of the country and its suitability for manufacturing as well as raising wool become more fully known and appreciated.

The "Wool Record" says, in part:

The Australian trade in combing tops is a steadily increasing one, Japan being the principal source of outlet, though considerable quantities are sold elsewhere, and much nearer England.

¹ See Bulletin, Volume XLI., page 540.

News comes to hand this mail from Australia to the effect that Messrs. F. W. Hughes, Ltd., of Sydney, have orders on hand for 1,000,000 pounds of tops to be shipped from January to March, to Japan, a clear proof that the industry evidently rests on a sound footing. What Bradford topmakers find the most fault with is that the Australian topmaking industry should be subsidized, the bonus paid upon the export no doubt enabling the firm to produce tops at a profit. We also have the information that 618 bales of wool were sent to Japan from Sydney during last November, a Japanese buyer being credited with paying up to the then highest price of the season. Our Australian authority also informs us that to produce the quantities of tops already named would take 2,450 bales of scoured wool, which would weigh something like 308,500¹ pounds, and estimated to be worth about £35,000. We make no comment upon this aspect of the Australian industry, but are in a position to inform topmakers both in England and on the Continent that topmaking in Australia seems to us to have commenced a permanent career, and we should not be surprised in the very near future to see a further important development in the consumption of wool which will be a further surprise to the Bradford trade. We hear from a reliable source that a firm of considerable means and standing is contemplating worsted spinning and manufacturing, and to find yarns being offered in markets where up to the present Bradford spinners and export houses have held the field, would strike us as being quite in accordance with the development seen in other branches of the industry. The wool trade is undoubtedly passing through a very progressive period, and quick expansion is going on at the producing end, this no doubt being largely the result of the abounding prosperity which has obtained in pastoral circles throughout the Commonwealth.

AN INDUSTRY WORTH WHILE?

SOME COMMENT BY PROFESSOR TAUSSIG AND A PROTECTIONIST REPLY.

IN the "Boston Transcript" of February 7 there appeared the following report of an address by Professor Taussig of Harvard University :

Those who listened to Professor F. W. Taussig's seventh Lowell lecture last evening on "Tariff Problems," the special topic being woolen manufactures, had no difficulty in understanding that, from the lecturer's point of view, the manufacture is one

¹ There is an evident error in this statement, for more than 1,000,000 pounds scoured wool are required to produce 1,000,000 pounds of top. — *Ed.*

in which the question of the propriety of further fostering it may certainly arise. It lacks the distinctive American feature of "beating the world;" it is indeed a work which is done better abroad, while there seems now to be no prospect of sensible improvement in the conditions under which it is carried on. Further than this, it may readily be believed that a moral question may be raised with reference to some of the arguments presented by the manufacturers when they have sought to maintain or increase the duties.

"The United States and Russia are the only two civilized countries that to-day maintain a duty on raw wool," said the speaker, in his introduction. He traced the history of the imposition of the duty, which like others had its rise in the great need of money during the Civil War, and showed how greatly conditions have been changed since that time. Wool being protected it was but fair for those engaged in the manufacturing of wool to be protected against the importation of goods made from free wool in other countries. Therefore, "compensating" duties were arranged. The basis of computation for the compensating duty was that it requires four pounds of wool to make one pound of woollen cloth, and on this basis, with a duty of eleven cents on raw wool, the proper protection to the manufacturer should be forty-four cents on manufactured woollen goods. There was necessary besides in the war times some additional tax for revenue, and accordingly an ad valorem duty of thirty-five per cent a pound was added. A portion of this, ten per cent, was to offset the large internal revenue taxes that the war suggested, and, in the later development of the subject, it became evident that although these disappeared, their fellow in the wool tariff not only remained, but increased.

As later developed the compensating duty was supposed to be merely to make matters even with manufacturers abroad while the ad valorem duties were in the line of protection. One of the suggestions later in the lecture was that the amount of protection has been much larger than has been apparent by the division of the duty, and this, Professor Taussig suggested, came about by something akin to erroneous figures on the part of the wool advocates of the high tariff. That the tariff of 1867 was honestly figured by the manufacturers of the day there seems to be no question. The allowance was probably ample, but it was not exorbitant, but the conditions have changed greatly since those days. One of the items in this change has been the greater use of combing wools. The clothing wools of 1867 were of a kind that shrink enormously, as much as from two-thirds to three-quarters. It was on the last named basis that was figured the ratio, four pounds of raw wool to one pound of cloth. Since 1867 much use has been made of the combing wools which shrink perhaps 50 per cent, and some as low as one-third. Under such conditions the ratio one to four is obviously

too high. Tabulations of production in the different kinds of wools emphasized this point, and it became evident that by far the greater increase in the manufacture lay in the combed wool fabrics, while the clothing wool manufacture has shown continual decline.

Another factor that must be considered is the use of substitutes for wool. This has been a world-wide process, although accentuated in the United States, and now about half the manufactures of woollen goods in the country show a percentage of adulteration. Here again the ratio of one to four in the duty is excessive, and here again the manufacturer is unduly protected. These are the findings, so far as the figures are concerned, of President Taft's Tariff Board.

In the consideration of the increase in the tariff, which in 1909 with about the same specific duty, has been raised in the ad valorem factor from the 35 per cent of 1867 to 50 or 55 per cent, Professor Taussig finds that it was openly done as a policy of protection. The change was insidious, and the fact is evident that it afforded much more protection than was openly avowed.

Here the mistake that has been made was in trying to conceal the truth, because such matters will in the long run become known. Professor Taussig believes that in dress goods and in rugs, those engaged in the work of forwarding the legislation ought to have known the facts, and yet added to a duty already high, and gained much more than normally appeared.

There has been a great increase in the manufacture of woollen goods in the country and the imports have gone down. That the latter have not been altogether dependent on the tariff is shown by the fact that during free wool there was no great leap upward, but the regular decline was continued. There was no evidence during the existence of the Wilson tariff to show that the proceeding would kill American industries.

The speaker next raised the question about how long should protection be continued. The manufacturers and the Tariff Board alike declare that there has been no improvement but rather a retardation in the woollen manufacture and that it is actually better done abroad. In this it is singularly different from some other American manufactures, cotton and silk, for example, where America leads the world and where America exports the machinery for the work. On the contrary, America imports the machinery for wool manufactures, and since labor is no more efficient, and machinery is never so well operated as in its native country, this country cannot hope for a future in the woollen manufactures. The tariff problem here is plainly, "Is the maintenance of an industry like this worth while?" It is an industry that has no advantage and which is not better handled here than elsewhere. It presents no evidences of future independence, and the higher duties, which are duties on American and foreign-raised wool alike, must be kept up. Then there is

the other question, that of vested rights, the policy towards manufacturers in the industry who have placed their money in the manufactures under the protection of the past. "The duty on wool has no right to exist."

In the "Transcript" of February 9 this answer was published by the Secretary of the National Association of Wool Manufacturers:

To the Editor of the "Transcript":

In your report of Professor F. W. Taussig's seventh Lowell lecture devoted to the wool manufacture, you quote him as stating:

Another factor that must be considered is the use of substitutes for wool. This has been a world-wide process, although accentuated in the United States, and now about half the manufactures of woollen goods in the country show a percentage of adulterations.

Such an assertion from an economist who should know the facts will profoundly surprise all men in close touch with a great industry of supreme importance to New England. Professor Taussig apparently believes that because of, or under, our protective system the use of substitutes for wool is increasing in the United States. An authoritative report on that point has lately been presented by the Census Bureau of the Federal Government. Citing the returns for "materials used" in 1899 and again in 1909, these United States officials say:

This statement shows that there have been some interesting and important changes in the character of materials used during the past decade. The quantity of wool consumed, in condition purchased, increased from 330,179,000 pounds to 474,751,000 pounds, or 44 per cent; reckoned on a scoured-wool basis, the increase was 50 per cent. The quantity of raw cotton consumed decreased from 40,245,000 pounds to 20,055,000 pounds, or 50 per cent, while the amount of cotton yarn purchased increased from 35,343,000 pounds to 39,169,000, or 11 per cent. The net result is a decided decrease in the amount of cotton used as a material by wool manufacturers.

The figures also show a marked decrease in the use of shoddy. The quantity purchased decreased 35 per cent, and the amount manufactured in woollen mills for use therein fell off 10 per cent. In 1899 the total amount of shoddy consumed by woollen and worsted manufacturers was 68,663,000 pounds; in 1909 it was only 53,621,000 pounds, a decrease all the more significant when the growth of the industry is considered.

These specific records of materials actually consumed in American woolen and worsted mills show a marked decline and not an "accentuation" in the use of substitutes for wool. As for shoddy, the report of the Tariff Board states :

The greatest shoddy-producing center in the world is in and near Batley and Dewsbury, England. Of the 900 rag-grinding machines in the United Kingdom, Yorkshire, in which Batley and Dewsbury are located, has 881 machines. In the whole of the United States there are only 346 rag-grinding machines.

In other words, the shoddy business is potentially far greater in the free wool, free trade United Kingdom than it is in protectionist America. Professor Taussig's shaft aimed at the protective system flies wide of its mark.

Again Professor Taussig is quoted as stating :

The manufacturers and the Tariff Board alike declare that there has been no improvement but rather a retardation in the woolen manufacture and that it is actually better done abroad.

The manufacturers who say this are not named, nor is the Tariff Board directly quoted. What the Tariff Board has said is that the rank and file of the employees of the woolen and worsted industry are no more efficient in this country than they are abroad — but the Board very frankly gives the reason for it in these words :

In the centers of the industry abroad there is an adequate supply of labor which has been trained for generations in this one industry. In the United States a considerable portion of the labor is found to be of unskilled immigrants, with no previous experience in manufacture; and in certain centers this population is of a very fluctuating kind, and the manufacturer is obliged continually to break in a new set of inexperienced operatives.

All this is true. It is unquestionably a handicap upon American mills to have to train unskilled workers, native-born or foreign-born. But these workers once trained and enabled to earn higher wages, thereby become of distinctly increased economic value to the United States. As for the manufacturers themselves, the managers, the experts, the "men higher up," the Tariff Board has nothing but praise for them. "Foreign manufacturers," declares the Board, as a result of its investigations in Europe, "do not keep their costs in any such detail" as American mills — a most important element in modern business. And as to the wide disparity in wages of labor between this country and Europe, the Board further declares that "on certain specialties the largest and most efficient American mills are able by

skilful organizations materially to reduce the difference in cost." These are not the characteristics of a retarded, "decadent" industry. A little more than forty years ago the late Eben D. Jordan was thus quoted in the columns of the "Transcript":

The firm has now been in business more than eighteen years. When they began, there were but one or two articles outside the plain cotton fabrics in their trade that were not obtained from abroad; now but one-tenth of their entire stock yearly sold passes through the custom house, and that is composed of the highest range of goods not sought for by the people at large. Mr. Jordan's experience, gathered from repeated visits to distant markets, leads him to confidently believe that ere long America will depend entirely upon her own industry to clothe the masses of her people, and eventually will command her share of the trade of the world.

In the woollen clothing of the people Mr. Jordan's prediction has been virtually fulfilled. Certainly less than one-tenth of the woollen fabrics now sold and worn in the United States is of foreign manufacture. In the census year 1909, the total production of the woollen and worsted mills of the United States was valued at \$420,000,000 and the total imports of woollen and worsted cloths, dress goods, etc., were only about \$12,000,000, foreign price.

Not only all the staple fabrics but a greater and greater proportion of the finer fabrics is American-made. This industry — and bear in mind that it is almost two-thirds a New England industry — which Professor Taussig condemns, to quote the "Transcript's" caption as "not worth preserving," has kept even pace with the general progress of America, in the face of peculiar difficulty and discouragement. Against Professor Taussig's dictum allow me to quote the expert judgment of the chief present importer of English fabrics into the United States:

There are no more expert manufacturers anywhere than the best of those in this country. They are wonderfully quick to catch ideas, to modify, alter, improve, and to meet quickly the ever-changing demands of fashion and fancy. They produce as great a variety of woollen cloths as can be found in the whole of Europe together.

The fine and medium grades of the woollen cloths made here are generally better than those of equal quality to be obtained in any other country. American colors are, as a rule, better, clearer, and more lasting than those of similar foreign-made fabrics. The designing talent in America is quite equal to any in Europe.

Europe excels only in the finer or finest grades. Such are not made in America, but easily could be except for the fact that the small quantities of the very best woolens consumed in any one country would fail to justify the establishment of

the complex and highly capitalized plants which would be necessary.

This great merchant is as familiar with the characteristics of American and English cloths as is Professor Taussig with the contents of his library. It is a strange fact that English importers and, in fact, foreign manufacturers themselves, should speak with less heat and prejudice against American achievement than a distinguished American economist.

WINTHROP L. MARVIN.

Boston, February 8.

BORDER TWEEDS.

AN IMPROVEMENT IN QUALITY.

THE experience of the Border towns of Scotland narrated below is an illustration of the value of a standard of quality in a manufacture, and of holding fast to it notwithstanding temptations to reduce it for the purpose of meeting temporary trade conditions and changes in markets. The old saying, "Well bought is half sold," is as true now as it ever was and it is equally true that a reputation for the manufacture of fabrics of a standard quality will in the long run prove to be the paying policy. It is difficult to establish a reputation for a product, but once established a very little deviation therefrom will undo in a season the results of years of effort. It is gratifying to know that these Scotch manufacturers have retraced their steps and are producing a fabric worthy of their old reputation for style, appearance, and durability.

The year now ending has been one of continued and increasing prosperity for the tweed manufacturers of the Border towns of Scotland. The industry is of great importance to the North, providing, as it does, employment for some 15,000 workpeople. In Hawick, Galashiels, Selkirk, Peebles, and adjoining towns there are at present thirteen separate spinning mills, sixty-five woolen mills, and sixteen hosiery factories. A year in which employment has been abundant at good wages for so large a community is cause for national satisfaction. While the primary cause of prosperity has been the call of fashion, which has been constant, but for which there can be no guarantee of continuance, other causes have been at work which, fortunately, have in themselves elements of stability. There is first the excellence and suitability of the fabrics the Border factories produce. Manufacturers and distributors alike find that, in the end, it is

suitability and quality that tell. The whole trend of modern trading favors pedigree articles when these get to be known.

This is what has been happening to Scotch tweeds for several years past. The fatal policy of some ten years ago, when the industry was badly hit by tariffs and by the competition of Yorkshire, of lowering the standard by mixing cotton with wool by the scribbling process has been completely dropped, and it is satisfactory to know that the firms that kept their standard highest have secured the greatest share of prosperity. It was the care and skill exercised by the best firms in selecting sound wools and in dyeing, spinning, and designing them that has raised the whole industry of the Border towns to that pitch of excellence that commands now a world-wide market.

In addition to the enterprise of individual firms, there has been combined action of an educational kind. A technical school well equipped with day and evening classes was established a few years ago at Galashiels. More recently, continuation classes have been instituted in several of the weaving towns. The Border Chamber of Commerce has also been able to take successful action in preventing inferior imitations being sold as genuine Scotch tweed. Though the protection so far granted by the legislation of the Board of Trade is thought insufficient, it is something. As recently as November last a Liverpool trader was convicted of selling as "Scotch Tweed" an inferior substitute not answering that description. The substantial fine of £20 was inflicted, with £25 additional as costs.

Following suitability and intrinsic excellence as elements of permanence, and closely related to them, come changed conditions in our national habits of life. During the past few years there has been an enormous increase among the more leisured classes of desire for the delights of the country and an open-air life. The golf club and the motor car have been working a revolution in our conceptions of suitable wearing apparel, all of which has been favorable to the Border woolen trade. For outdoor wear, for travel, or for sport, for man or woman, Scotch tweeds can claim to hold the field. In addition to this, motor traveling has created a woolen industry and a very valuable one peculiar to itself. Broadcloth in black or blue, once the conventional standard for proper city wear, is fast being pushed aside in favor of cloths that are wind and weather resisting and that do not spoil with dust. It is the motor car that has done this. As motor traction has come to stay, and is, as yet, only at its beginnings, the trade in woollens it has called into use will stay also, and grow. As the cloths are high priced, the trade benefits every branch — wool grower, dyer, spinner, weaver, and the distributing agencies that handle the goods.

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL AND MANUFACTURES OF WOOL FOR THE TWELVE
MONTHS ENDING DECEMBER 31, 1910 AND 1911.

GROSS IMPORTS.

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending December 31.		Values for Twelve Months ending December 31.	
	1910.	1911.	1910.	1911.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, ETC., AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing (dutable) —	<i>Pounds.</i>	<i>Pounds.</i>		
Imported from—				
United Kingdom	21,247,459	17,603,867	\$5,360,133	\$4,052,806
Belgium	40,542	41,891	11,942	9,077
Argentina	22,221,590	13,333,235	5,192,006	2,547,748
Uruguay	6,502,975	561,360	1,625,843	120,740
Australia and Tasmania . . .	28,309,907	9,201,119	7,310,772	2,409,963
Other countries	6,274,085	2,111,030	1,539,937	476,237
Total	84,596,558	42,852,502	\$21,040,633	\$9,616,071
Class 2—Combing (dutable)—				
Imported from—				
United Kingdom	12,348,474	7,150,024	\$3,119,130	\$1,783,115
Canada	1,447,778	173,726	373,123	43,747
South America	2,503,105	2,642,262	667,204	593,477
Other countries	1,189,242	1,287,846	419,324	451,588
Total	17,488,599	11,253,858	\$4,578,781	\$2,871,927
Class 3—Carpet (dutable)—				
Imported from—				
United Kingdom	19,063,851	20,373,538	\$2,897,940	\$3,044,600
Russian Empire	13,022,075	17,417,899	1,775,569	2,376,894
Other Europe	6,478,024	11,674,993	890,931	1,503,009
Argentina	2,648,549	4,356,162	298,098	526,316
Chinese Empire	29,972,788	35,799,956	3,674,093	3,946,299
East Indies	1,900,740	3,030,398	239,147	348,581
Turkey in Asia	3,626,862	8,322,360	567,410	1,161,591
Other countries	1,330,935	840,644	139,845	84,134
Total	049,824	101,816,150	\$10,483,033	\$12,991,424
Total unmanufactured . .	80,134,981	155,922,510	\$36,102,447	\$25,479,422
MANUFACTURES OF—				
Carpets and carpeting (duti- able)—	<i>Sq. Yards.</i>	<i>Sq. Yards.</i>		
Imported from—				
United Kingdom	132,091	142,450	\$345,511	\$424,772
Turkey in Europe	499,908	302,219	2,197,745	1,615,943
Asia	404,988	394,242	1,206,342	1,515,272
Other countries	99,069	69,046	396,038	318,308
Total	1,136,056	907,957	\$4,148,636	\$3,874,295

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL, ETC.GROSS IMPORTS. — *Continued.*

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending December 31.		Values for Twelve Months ending December 31.	
	1910.	1911.	1910.	1911.
	<i>Pounds.</i>	<i>Pounds.</i>		
Clothing, ready-made, and other wearing apparel (dutiable) . .	.....	.....	\$2,145,651	\$2,186,195
CLOTHS—(dutiable)—				
Imported from—				
United Kingdom	3,167,981	2,725,351	\$3,457,569	\$3,150,396
Belgium	533,011	472,303	547,608	530,762
Germany	1,354,670	736,517	1,230,111	744,354
Other countries	375,068	218,974	396,892	267,114
Total	5,430,730	4,153,145	\$5,682,180	\$4,692,626
DRESS GOODS, WOMEN'S AND CHILDREN'S—(dutiable)—	<i>Sq. Yards.</i>	<i>Sq. Yards.</i>		
Imported from—				
United Kingdom	22,897,556	12,557,764	\$4,012,360	\$2,424,486
France	11,865,988	5,923,544	2,558,949	1,341,593
Germany	6,717,973	2,927,971	1,665,986	709,850
Other countries	128,789	107,245	34,935	26,335
Total	41,610,306	21,516,524	\$8,272,280	\$4,502,264
All other (dutiable) . . . . .	.....	.....	\$1,338,749	\$961,498
Total manufactures of . . . . .	.....	.....	\$21,587,496	\$16,216,878

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL, ETC.—*Concluded.*

EXPORTS OF WOOL AND MANUFACTURES OF.

FOREIGN.				
ARTICLES.	1910.	1911.	1910.	1911.
	Quantities.	Quantities.	Values.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, ETC., AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing (dutiable) lbs.	7,062,294	3,002,334	\$1,700,091	\$702,471
Class 2—Combing “ “	648,499	175,756	141,883	41,669
Class 3—Carpet “ “	1,345,433	322,625	182,961	39,095
Total unmanufactured	9,056,226	3,500,715	\$2,024,935	\$783,235
MANUFACTURES OF—				
Carpets and carpetings, sq. yds., dutiable	8,254	3,768	\$47,852	\$15,089
Clothing and other wearing ap- parel, dutiable			22,433	11,671
Cloths, pounds, dutiable	38,421	28,235	33,046	25,943
Dress goods, women's and chil- dren's, sq. yds., dutiable . . .	213,936	242,151	43,092	45,148
All other, dutiable			33,031	42,609
Total manufactures of			\$179,454	\$140,460
DOMESTIC.				
WOOL, AND MANUFACTURES OF:				
Wearing apparel			\$1,507,451	\$1,636,719
All other			852,481	834,214
Total			\$2,359,932	\$2,470,933

WOOL REMAINING IN WAREHOUSE DECEMBER 31, 1910 AND 1911.

ARTICLES.	December 31.			
	1910.		1911.	
	Quantities.	Values.	Quantities.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, AND OTHER LIKE ANIMALS, AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing, lbs.	32,869,617	\$8,520,288	21,391,350	\$5,372,718
Class 2—Combing, “	3,493,257	886,739	2,924,330	744,516
Class 3—Carpet, “	16,627,364	3,681,555	17,689,175	3,388,510
Total unmanufactured, lbs. . .	52,990,238	\$13,088,562	42,004,855	\$9,505,744

QUARTERLY REPORT OF THE BOSTON WOOL MARKET
FOR OCTOBER, NOVEMBER AND DECEMBER, 1911.

DOMESTIC WOOLS. (GEORGE W. BENEDICT.)

	1911.			1910.
	October.	November.	December.	December.
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.				
(WASHED.)				
XX and above	28 @ 28½	28½ @ 29	29 @ 30	30 @ 31
X	27 @ 27½	27½ @ 28	28 @ 28½	29 @ 30
1/2 Blood	31 @ 32	32 @ 33	33 @ 34	34 @ 35
"	30 @ 31	31 @ 32	32 @ 33	33 @ 34
"	29 @ 30	30 @ 31	31 @ 32	32 @ 33
Fine Delaine	29½ @ 30	30 @ 30½	30½ @ 31	33 @ 34
(UNWASHED.)				
Fine	20 @ 21	21 @ 21½	21½ @ 22	22 @ 23
1/2 Blood	25 @ 26	25½ @ 26½	26 @ 26½	29 @ 30
"	24½ @ 25½	25 @ 26	25½ @ 26½	28 @ 29
"	24 @ 25	24½ @ 25	25 @ 25½	27 @ 28
Fine Delaine	24 @ 25	24½ @ 25	25 @ 26	26 @ 27
MICHIGAN, WISCONSIN, NEW YORK, ETC.				
(WASHED.)				
Fine	29 @ 30	30 @ 31	31 @ 32	32 @ 33
1/2 Blood	29 @ 30	30 @ 31	31 @ 32	32 @ 33
"	28 @ 29	29 @ 30	30 @ 31	31 @ 32
Fine Delaine	28 @ 29	29 @ 30	30 @ 30½	32 @ 33
(UNWASHED.)				
Fine	20 @ 20½	20½ @ 21	21 @ 21½	20 @ 21
1/2 Blood	24½ @ 25	25 @ 26	25½ @ 26	28 @ 29
"	24 @ 24½	25 @ 25½	25 @ 26	27 @ 28
"	23½ @ 24	24 @ 24½	24½ @ 25	26 @ 27
Fine Delaine	23 @ 24	23½ @ 24	24 @ 24½	25 @ 26
KENTUCKY AND INDIANA.				
(UNWASHED.)				
1/2 Blood	24½ @ 25½	24½ @ 25½	25½ @ 26	28 @ 29
"	24 @ 25	24 @ 25	25 @ 25½	27 @ 28
Braid	22 @ 23	22½ @ 23	22½ @ 23½	22 @ 23
MISSOURI, IOWA, AND ILLINOIS.				
(UNWASHED.)				
1/2 Blood	23½ @ 24	24 @ 24½	24½ @ 25	27 @ 28
"	23 @ 23½	23½ @ 24	24 @ 25	25 @ 26
Braid	21½ @ 22	22 @ 23	22½ @ 23	22 @ 23
TEXAS.				
(SCOURD BASIS.)				
12 months, fine, and fine medium . .	52 @ 53	52 @ 53	53 @ 55	58 @ 60
6 to 8 months, fine	45 @ 47	45 @ 47	46 @ 48	52 @ 54
12 months, medium	46 @ 47	46 @ 47	47 @ 48	52 @ 54
6 to 8 months, medium	40 @ 42	40 @ 42	41 @ 43	47 @ 48
Fall, fine and fine medium	40 @ 42	40 @ 42	41 @ 43	48 @ 50
" medium	37 @ 39	38 @ 40	39 @ 41	42 @ 43
CALIFORNIA.				
(SCOURD BASIS.)				
Free, 12 months	48 @ 50	48 @ 50	48 @ 50	55 @ 56
" 6 to 8 months	43 @ 44	43 @ 44	43 @ 44	51 @ 52
Fall, free	38 @ 40	38 @ 40	38 @ 40	44 @ 45
" defective	32 @ 34	32 @ 34	32 @ 34	35 @ 38
TERRITORY WOOL: Montana, Wyoming, Utah, Idaho, Oregon, etc.				
(SCOURD BASIS.)				
Staple, fine and fine medium	59 @ 61	60 @ 62	60 @ 62	62 @ 63
" medium	52 @ 54	53 @ 55	54 @ 56	58 @ 59
Clothing, fine and fine medium . . .	50 @ 53	50 @ 53	51 @ 54	55 @ 57
" medium	44 @ 47	45 @ 47	47 @ 48	50 @ 51
NEW MEXICO, (Spring.)				
(SCOURD BASIS.)				
No. 1	47 @ 48	47 @ 48	48 @ 50	55 @ 57
No. 2	42 @ 43	42 @ 43	43 @ 44	46 @ 47
No. 3	33 @ 36	33 @ 36	35 @ 37	36 @ 37
No. 4	31 @ 33	31 @ 33	32 @ 34	34 @ 35
NEW MEXICO, (Fall.)				
(SCOURD BASIS.)				
No. 1 }				
No. 2 } None here.				
No. 3 }				
No. 4 }				
GEORGIA AND SOUTHERN.				
Unwashed	22 @ 23	22 @ 23	23 @ 23½	24 @ 25

DOMESTIC WOOL.

Boston, December 30, 1911.

The last quarter of the year closes with a more hopeful feeling throughout the wool trade than has existed for several months previously.

At last the consumption of manufactured goods seems to have caught up with production and the mills are receiving sufficient orders to keep about 80 to 85 per cent of their machinery running against 65 to 70 per cent, which was the average a few months ago.

This improvement in conditions is partly due to the expectation that there will probably be no tariff legislation enacted at this session of Congress, certainly not in time to affect the next heavyweight business. Report of the Tariff Board has been submitted to Congress and its findings justify the conclusion that no drastic cuts can be made from the present rates of duties, either on wool or manufactures of wool, without seriously injuring these industries.

Wools of medium grade have been especially strong and some advance in prices has been obtained.

The stock of wool now on hand is comparatively small and indications are that all wools now on the market will be wanted before the new clip is available and at full prices.

GEORGE W. BENEDICT.

PULLED WOOLS. (*Scoured basis.*) (W. A. BLANCHARD.)

	1911.			1910.
	October.	November.	December.	December.
Extra, and Fine A	48 @ 55	48 @ 54	48 @ 54	55 @ 62
A Super	46 @ 48	45 @ 47	46 @ 48	50 @ 53
B Super	42 @ 44	40 @ 44	42 @ 46	43 @ 47
C Super	33 @ 36	34 @ 37	35 @ 38	33 @ 38
Fine Combing	48 @ 52	48 @ 52	50 @ 53	62 @ 65
Medium Combing	44 @ 46	44 @ 46	45 @ 47	55 @ 60
Low Combing	39 @ 42	39 @ 42	40 @ 43	50 @ 53
California, Extra	48 @ 52	47 @ 50	48 @ 52	53 @ 58

REMARKS.

The woolen mills were well supplied with orders throughout the quarter and the current production of pulled wool was quite generally absorbed. There was a slight falling off in the demand during the month of November and a consequent recession in prices; but the decline was small and December saw a full recovery, with promise of a further advance by the turn of the year. Neither fine wools nor combings are made to any extent in this quarter and the quotations given are, in the main, estimated values. As before, the season has been one in which medium and coarse wooled fabrics have had the call, and B and C Supers have been the most active and, relatively, the highest priced wools on the list.

W. A. BLANCHARD.

FOREIGN WOOLS. (MAUGER & AVERY.)

	1911.			1910.
	October.	November.	December.	December.
Australian Combing:				
Choice	40 @ 42	40 @ 42	40 @ 41	40 @ 41
Good	37 @ 38	37 @ 38	37 @ 38	36 @ 38
Average	32 @ 35	32 @ 35	32 @ 35	35 @ 37
Australian Clothing:				
Choice	41 @ 42	41 @ 42	42 @ 43	40 @ 42
Good	36 @ 39	36 @ 39	37 @ 40	36 @ 38
Average	34 @ 36	34 @ 36	34 @ 36	35 @ 36
Sydney and Queensland:				
Good Clothing	40 @ 41	40 @ 41	40 @ 42	35 @ 39
Good Combing	36 @ 40	37 @ 40	37 @ 40	36 @ 38
Australian Crossbred:				
Choice	39 @ 41	39 @ 41	40 @ 41	37 @ 40
Average	34 @ 36	33 @ 36	33 @ 36	34 @ 36
Australian Lambs:				
Choice	42 @ 45	42 @ 45	42 @ 45	42 @ 46
Good	39 @ 40	39 @ 40	39 @ 40	39 @ 40
Good Defective	35 @ 37	36 @ 37	36 @ 37	35 @ 36
Cape of Good Hope:				
Choice	34 @ 35	34 @ 36	34 @ 36	34 @ 35
Average	32 @ 33	32 @ 33	32 @ 33	32 @ 33
Montevideo:				
Choice	34 @ 36	34 @ 36	34 @ 35	35 @ 36
Average	32 @ 33	32 @ 33	32 @ 33	31 @ 33
Crossbred, Choice	35 @ 36	35 @ 36	34 @ 35	35 @ 39
English Wools:				
Sussex Fleece	40 @ 41	40 @ 41	40 @ 41	40 @ 42
Shropshire Hogs	39 @ 40	39 @ 40	39 @ 40	40 @ 42
Yorkshire Hogs	35 @ 36	35 @ 36	35 @ 36	36 @ 38
Irish Selected Fleece	35 @ 36	35 @ 36	34 @ 35	.....
Carpet Wools:				
Scotch Highland, White	23 @ 24	23 @ 24	23 @ 24	21 @ 23
East India, 1st White Joria	29 @ 31	29 @ 31	29 @ 31	30 @ 32
East India, White Kandahar	27 @ 28	27 @ 28	26 @ 28	24 @ 26
Donskoi, Washed, White	33 @ 34	33 @ 34	33 @ 34	32 @ 34
Aleppo, White	32 @ 33	32 @ 33	32 @ 33	22 @ 25
China Ball, White	22 @ 24	23 @ 25	23 @ 25	22 @ 24
" " No. 1, Open	20 @ 22	21 @ 22	21 @ 23	20 @ 21
" " No. 2, Open	14 @ 16	14 @ 16	14 @ 16	13 @ 14

FOREIGN WOOLS.

The closing months of the year 1911 witnessed a somewhat improved demand for foreign wools. Manufacturers generally had reduced their supplies to such a small amount that they were compelled to make the best selection possible of fine wools and secure what was available of low crossbreds.

Domestic wools, though advancing in price, were still much cheaper than the medium and finer crossbreds, owing to the very firm prices prevailing in the European markets. There is a growing opinion, however, that the manufacture of wool has been overdone in Europe and that a lowering of values of wool is quite possible during the coming year.

Except for special purposes, English wools have not been in much request here and transactions have been quite limited.

The carpet industry is not very prosperous and the firm position of carpet wools the world over tends to restrict business. The commotion in China appears to restrict shipments of wool from that country somewhat.

BOSTON, January 4, 1912.

BULLETIN

OF THE

National Association of Wool Manufacturers

A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

VOL. XLII.]

BOSTON, JUNE, 1912.

[No. II.]

THE UNDERWOOD WOOL AND WOOLEN BILL.

SECOND CONSIDERATION OF THE MEASURE IN THE NATIONAL SENATE AND HOUSE OF REPRESENTATIVES.

NOT until well into the second session of the Sixty-second Congress did the Underwood wool and woolen bill, a compromise form of which had been vetoed in the previous session on August 17 by President Taft, make its reappearance in the House of Representatives. The Underwood bill in its original shape had been referred early in the session to the Committee on Ways and Means. Then came the publication of the Tariff Board report on December 20, 1911. For several weeks thereafter the wool and woolen question was allowed to slumber by the majority leaders of the House. The Underwood bill (H.R. 22195) was not reported to the House until March 27, 1912, when Chairman Underwood presented it, and at the same time ex-Chairman Payne offered the minority report. Then the Underwood bill, with the majority and minority views upon it, was referred to the Committee of the Whole House on the State of the Union and ordered to be printed.

In the majority report Chairman Underwood and his associates said:

Except for the change in date of effectiveness and the correction of minor clerical errors, this bill, H.R. 22195, is identical with H.R. 11019, introduced at the first session of

the present Congress. Downward tariff revision was the chief issue in the 1910 campaign. The overwhelming manner in which the Democratic Party was given the control of the House of Representatives in the election of that year severely repudiated the Republican failures at tariff reform in the Payne-Aldrich Act of 1909 and plainly instructed the Democrats to proceed at the earliest practicable moment with a downward revision of the tariff. Hence it was that upon the convening of the Sixty-second Congress in the special session of April 4, 1911, this committee at once applied itself to the work of revising Schedule K in an effort to make immediately effective the mandates of the people with regard to tariff revision.

The bill H.R. 11019 was the result of elaborate and painstaking investigations by the committee, during which was assembled and examined all the information available with regard to the production and manufacture of wool. The rates of duty worked out by the committee and embodied in H.R. 11019 were fixed without any reference whatever to protection, but with an intent to reduce the "indefensible" rates which have been so long a burden to the consumer and with the only other view to producing the necessary revenue from this schedule.

A modified form of H.R. 11019, carrying slightly increased rates of duty, was passed by the Congress, submitted to the President of the United States, and vetoed by him on August 17, 1911. The veto was defended on the ground that the Tariff Board had not completed its investigations of Schedule K. In this veto message the President quoted from his message to Congress of December 7, 1909, as follows:

"I believe that the work of this Board will be of prime utility and importance whenever Congress shall deem it wise again to readjust the customs duties. If the facts secured by the Tariff Board are of such a character as to show generally that the rates of duties imposed by the present tariff law are excessive under the principles of protection as described in the platform of the successful party at the late election, I shall not hesitate to invite the attention of Congress to this fact and to the necessity for action predicated thereon."

In his veto message of August 17, 1911, the President also said:

"When I have the accurate information which justifies such action I shall recommend to Congress as great a reduction in Schedule K as the measure of protection, already

stated, will permit. The failure of the present bill should not be regarded, therefore, as taking away the only chance for reduction by this Congress."

In its report on H.R. 11019 (H. Rept. 45, 62d Cong., 1st sess.) the committee said:

"It would be trifling with the people to give further consideration to Republican counsels of more delay in this matter, whether with regard to statistical data concerning cost of production, promised at a future date, or for any further reason."

Notwithstanding this conviction, the Democratic majority of the House of Representatives, impatient to respond to the demands of the people for a speedy revision of a schedule of indefensible rates, was forced to delay further effort in answer to the protests of the American people.

In his message of December 20, 1911, the President said:

"I now herewith submit a report of the Tariff Board on Schedule K. The Board is unanimous in its findings. On the basis of these findings I now recommend that the Congress proceed to a consideration of this schedule with a view to its revision and a general reduction of its rates."

The committee has made a careful analysis of the report of the Tariff Board in order to interpret the findings and to discover in what particulars the committee's bill, H.R. 11019, was defective or failed to adjust the duties in an equitable and proper manner. This analysis has failed to reveal anything that requires a single change in the rates fixed in H.R. 11019, and the committee is constrained to present again the results of its investigation of last summer, as embodied in the bill presented to the House at that time.

Apparently the only real effect of the 12 months' delay in the revision of Schedule K, based upon the necessity, as stated by the President, of awaiting the report of the Tariff Board, has been to allow manufacturers another year of excessive rates and to compel the people to pay for their woolen clothing during the year about \$50,000,000 more than they would have paid under the rates of H.R. 11019.

As shown in the analysis, the data of the report of the Tariff Board have been found to be diffuse and unsystematic, to present insignificant findings, and, as stated, to afford the committee no valid reason for any change in its recommendations of last session with regard to the rates of Schedule K.

There followed in the majority report an attempted criticism of details of the Tariff Board report, not of a very

important or impressive character. Fault was found with almost every paragraph of the report. This criticism apparently was not the work of Chairman Underwood, but of some outsider drafted or volunteering for the service. Its points were summed up as follows :

1. The theory of applying tariff duties according to the difference in the cost of production in this and in foreign countries, upon which the Board has projected and prepared its report, is entirely erroneous and untenable. Furthermore, if this theory could have been systematically and carefully applied, it would not have afforded trustworthy results for guidance in preparing tariff legislation.

2. The Board's report is fragmentary and incomplete, and rests on an incorrect statistical basis. Hence it has no claims to confidence for the results set forth therein, even should the reliability of the theory of the cost of production be conceded.

3. Those persons who are willing to overlook the lack of theoretical soundness and of statistical accuracy, will find the data of the report too fragmentary and incomplete to admit of conclusions with reference to rates of tariff duty. Even under the most favorable interpretation of the report, conclusions as to duties can be reached for only a few paragraphs of the wool schedule, and for these paragraphs it is not possible to formulate definite conclusions, because the figures vary widely, and seriously lack uniformity and comparability. So much is this the case that justification is apparently afforded in the report for rates that are in conflict with one another. It is thus seen that the report leaves the question of the tariff duties on wool as much unsolved as before the Tariff Board was formed.

4. So far as conclusions can be drawn from the Board's report, it furnishes nothing to justify any change in the rates proposed in H.R. 11019. With full recognition of the incomplete, fragmentary, and unsatisfactory nature of the data, and with full admission of the inadequate and unreliable basis afforded for computations, the following table may be regarded as setting forth, as well as it is possible to do, the conclusions as to the rates of duty justified by the report.

TABLE 15.

Comparative equivalent ad valorem Rates of Duty in 1910 and 1911 with those of H.R. 22195, together with the Rates computed from the Tariff Board Report as equalizing Cost of Production.

ITEM.	Ad valorem rates per cent.			
	Equivalent, computed from Imports of —		H.R. 22195.	Computed from Tariff Board Report.
	1910.	1911.		
Unmanufactured wool	44.31	42.20	20	0-25
Noils, wastes, shoddies, mungo, flocks, etc., and all other wastes or rags composed wholly or in part of wool, n.s.p.f.	38.96	34.99	20	0-25
Combed wool or tops	111.73	(¹)	25	5-30
Wool and hair advanced in any manner, n.s.p.f.	86.33	89.93	25	5-30
Combed wool or tops, and wool and hair advanced, etc.	105.19	89.93	25	5-30
Yarns made wholly or in part of wool	82.58	76.61	30	12-45
Cloths, knit fabrics, felts not woven, and all manufactures of wool, n.s.p.f.	97.11	95.26	40	32-70
Blankets and flannels	95.57	93.66	30 and 45	(²)
Dress goods, women's and children's, coat linings, Italian cloths, bunting, and similar goods, n.s.p.f.	102.85	102.11	45	32-70
Clothiug, ready-made, and articles of wearing apparel of every description, including shawls, whether knitted or woven, and knitted articles of every description, etc. .	81.31	78.06	45	32-70
Webbings, gorings, suspenders, braces, bandings, etc.	87.06	84.76	35	(²)
Carpets and carpeting	60.65	61.62	25-50	(²)

¹ Combed wool or tops not reported.

² No data furnished by Tariff Board.

EXPECTED REVENUE FROM THE UNDERWOOD BILL.

Leaving this attempted criticism of the Tariff Board report, Chairman Underwood and his associates thus stated their idea of the probable revenue from their measure :

As the committee is resubmitting to the House the bill presented at the last session of Congress, with no change of basis or rates, no change in its revenue estimate is called for. In the following table is presented with other data, the results of the computation furnished in the report which accompanied H.R. 11019 (H. Rept. 45, 62d Cong., 1st sess.).

TABLE 16.

Summary of Imports and Duties for the Fiscal Years 1910 and 1911, with estimated Imports and Duties for a Twelve-month Period under H. R. 22195.

ITEM.	Paragraph Number.		Year.	Quantity.	Value.	Duties.	Average Unit of Value.	Equiva- lent Ad valorem Rate of Duty (Act of 1909).	Twelve-month Period under H. R. 22195.		
	H. R. 22195	Act of 1909.							Rate of Duty (Per Cent).	Estimated Imports.	Estimated Duties under New Rates on Estimated Imports.
Unmanufactured wool (pounds) . .	1	360-371	{ 1910 1911	256,604,638.14 165,900,839.08	\$47,687,293.20 29,572,258.52	\$21,128,728.74 12,482,854.91	\$0.186 .178	44.31 42.29	. . . 20	\$66,991,000.00	\$13,398,200.00
Nolls, wastes, shoddies, mungo, flocks, etc., and all other wastes or rags composed wholly or in part of wool, n.s.p.f. (pounds) . .	2	372-374	{ 1910 1911	577,720.00 461,259.00	203,509.25 191,391.00	79,293.00 66,963.90	.352 .415	38.96 34.99	. . . 20	890,535.00	178,107.00
Combed wool or tops, and wool and hair advanced in any manner, n.s. p.f. (pounds)	3	375, 376	{ 1910 1911	2,101.25 124.03	1,129.80 130.35	1,188.41 117.22	.538 1.05	105.19 80.99	. . . 25	732,508.00	183,128.00
Yarns made wholly or in part of wool (pounds)	4	377	{ 1910 1911	350,888.30 177,523.48	326,886.02 186,654.03	269,296.16 143,004.74	.908 1.05	82.38 76.61	. . . 30	1,373,937.00	412,181.00
Cloths (pounds)			{ 1910 1911	5,891,629.98 4,823,553.08	8,104,140.39 5,226,551.07	5,937,753.72 4,985,414.93	1.63 1.07	95.39 95.76	. . . 123,102,123.00	19,210,849.00	
Knit fabrics (not wearing ap- parel) (pounds)			{ 1910 1911	34,562.54 14,363.00	30,999.88 14,857.00	35,430.87 14,413.25	1.03 1.03	97.01 97.01	. . . 310,230.00	124,092.00	
Felts (pounds)			{ 1910 1911	90,022.95 78,249.00	107,018.43 96,892.34	103,821.16 92,564.97	1.19 1.24	95.53 102.34	. . . 103.20	95.53	
Plushes (pounds)			{ 1910 1911	18,421.38 13,017.00	16,726.46 11,709.00	17,117.80 12,082.53	.968 1.03	103.20 94.50	. . . 650,000.00	260,000.00	
All other manufactures, n.s.p.f. (pounds)			{ 1910 1911	362,975.75 297,192.82	383,402.91 336,932.69	371,760.96 312,820.14	1.08 1.13	92.84	. . . 40	24,062,353.00	3,924,841.00
Cloths, knit fabrics, felts not woven, and all manufactures of wool, n.s.p.f. (pounds)	5	378	{ 1910 1911	6,403,612.00 5,226,374.90	6,658,288.07 5,686,942.10	6,465,884.31 5,417,296.82	1.04 1.09	97.11 95.26	. . . 40	24,062,353.00	3,924,841.00
Blankets (pounds)			{ 1910 1911	53,024.90 43,112.84	45,985.47 55,832.69	33,767.77 41,808.12	1.07 1.05	73.42 74.88	. . . 95,897.60	28,769.00	
Flannels			{ 1910 1911	122,894.35 86,029.30	127,644.93 91,062.50	127,644.93 91,062.50	1.05 1.05	103.87 105.85	. . . 162,533.00	72,882.00	
Blankets and flannels	6	379	{ 1910 1911	168,889.82 141,861.89	161,412.70 132,870.62	161,412.70 132,870.62	. . . . .	95.57 93.66	30 and 45	258,430.00	101,651.00
Dress goods, women's and chil- dren's, coat linings, Italian cloths, bunting, and similar goods, n.s.p.f. }	7	380, 381	{ 1910 1911	9,218,374.10 6,364,272.87	9,481,206.75 6,498,616.36	9,481,206.75 6,498,616.36	. . . . .	102.85 102.11	. . . 45	25,408,458.00	11,433,806.00

Clothing, ready-made, and articles of wearing apparel of every description, including shawls, whether knitted or woven, and knitted articles of every description, etc. (pounds)	8	{ 1910 1911 }	860,412.87	1,776,236.34	1,444,296.87	2.06	81.31 45	5,066,362.00	2,279,863.00		
			926,616.02	2,251,374.13	1,762,093.68	2.44	78.06					
	9	{ 1910 1911 }	41,756.00	77,161.70	67,174.54	1.85	87.06 35	160,868.00	50,314.00		
			36,998.98	74,718.26	63,330.54	2.02	84.76					
	10	{ 1910 1911 }	23,084.90	62,700.00	38,930.65	2.71	62.09 40	79,346.00	31,738.00		
			24,351.31	46,935.00	33,384.79	1.93	71.13					
	11	{ 1910 1911 }	20,450.93	40,711.00	28,554.96	1.99	70.14 35	51,134.00	17,897.00		
			17,204.44	40,183.00	26,395.86	2.34	65.69					
	12	{ 1910 1911 }	6,781.75	8,222.00	6,272.77	1.21	76.29 30	9,992.00	2,998.00		
			5,507.25	7,567.00	5,449.99	1.37	72.02					
13	{ 1910 1911 }	23,058.73	41,058.00	25,645.89	1.78	62.46 35	51,722.00	18,103.00			
		23,008.56	45,288.00	27,316.62	1.97	60.32						
14	{ 1910 1911 }	163.00	187.00	120.44	1.15	64.41 30	235.00	71.00			
		446.30	407.07	287.78	.912	70.70						
15	{ 1910 1911 }	1,853.00	1,675.00	1,077.66	.904	64.34 30	1,763.00	529.00			
		4,835.00	4,253.00	2,764.90	.88	65.01						
16	{ 1910 1911 }	27.50	22.00	13.75	.80	62.50 25	24.00	6.00			
		10.00	12.00	6.60	1.20	55.00						
17	{ 1910 1911 }	1,004,009.23	4,392,786.43	2,660,723.16	4.37	60.57 50	5,582,157.00	2,791,079.00			
		886,151.09	3,686,366.89	2,272,082.85	4.16	61.64						
18	{ 1910 1911 }	36,537.89	30,587.00	20,273.13	.837	66.28 25	38,791.00	9,698.00			
		24,866.77	21,524.00	14,080.29	.865	65.42						
19	{ 1910 1911 }	49,535.25	24,756.11	50.00 25	62,824.00	15,706.00			
		. . . . .	67,270.23	33,635.11	. . . . .	50.00				
10-20	{ 1910 1911 }	4,027,483.68	2,806,388.52	60.65 25 to 50	5,877,988.00	2,887,825.00			
		. . . . .	3,919,808.19	2,415,404.79	. . . . .	61.62				
Total manufactures of wool, Total wool and manufactures of wool	{ 1910	23,057,958.78	20,776,121.26	90.10 42.55	63,831,469.00	27,157,816.00			
	{ 1911	. . . . .	218,823,150.82	16,499,697.67	. . . . .	87.65				
	{ 1910	70,745,251.98	41,904,850.00	59.23			 31.00	130,822,469.00	40,556,016.00
	{ 1911	. . . . .	248,395,409.34	28,982,562.58	. . . . .	59.89				

¹ Includes plushes and other pile fabrics.

² Includes \$3 free of duty.

³ Does not include knit fabrics not wearing apparel, which, in table estimated on the basis of net consumption, are included among wearing apparel, clothing, ready-made, etc.

As indicated in Table 16, the committee estimates that the duties during the first twelve-month period under H.R. 22195 will amount to \$40,556,016, which compares with \$41,904,850 for 1910 and \$28,982,553 for 1911. It is believed by the committee that no loss in revenue will result from the enactment of H.R. 22195, but that the bill will produce probably as much as in 1910, while at the same time the yearly burden resting upon the people owing to the cost of woollen clothing will be reduced by more than \$50,000,000.

THE FORM AND PHRASEOLOGY OF BILL.

The phraseology of the bill H.R. 22195 conforms throughout to that of H.R. 11019, which is practically the same as that of the act of 1909. In framing the bill the purpose of the committee has been to make no change in the language used in enumerating and describing the articles included under its provisions, except such as is necessarily involved in the omission of the provisions for the classification of raw wools, admixture of blood, the varying rates on washed, scoured, sorted, or skirted wools, etc., and the omission of subclassifications according to value, weight, or dimension of most of the groups of manufactured articles. The exclusive use of ad valorem duties obviates the intricate and complex qualifications, differentiations, and discriminations of Schedule K of the act of 1909. Ad valorem duties automatically adjust themselves to all these distinctions.

The enacting clause of the bill conforms exactly to that of the tariff act of August 5, 1909, of which the bill is practically an amendment, in order to avoid any possible ambiguity or conflict with regard to the insular possessions of the United States. The warehouse provision (Sect. 2) also conforms exactly to the corresponding provisions in the act of 1909 (Sect. 29), except that the provision for levying duties based on weight at the time of the entry of the merchandise is omitted, since the bill H.R. 22195 provides for no duties based on weight. Under this warehouse provision, as in the present act, articles in warehouse when the bill H.R. 22195 takes effect, on which duties have not been paid, shall be subjected to duty when withdrawn as if they had been imported after the taking effect of the act; but articles in warehouse on which duties have been paid and a permit of

delivery issued, shall be subject to the duties imposed prior to the enactment of the new bill.

OSCAR W. UNDERWOOD, *Chairman*.
 CHOICE B. RANDELL.
 FRANCIS BURTON HARRISON.
 WILLIAM G. BRANTLEY.
 DORSEY W. SHACKLEFORD.
 CLAUDE KITCHIN.
 OLLIE M. JAMES.
 HENRY T. RAINEY.
 LINCOLN DIXON.
 WILLIAM HUGHES.
 CORDELL HULL.
 W. S. HAMMOND.
 ANDREW J. PETERS.
 A. MITCHELL PALMER.

TEXT OF THE UNDERWOOD BILL.

The text of the Underwood wool and woollen bill, as reintroduced, was as follows:

[H.R. 22195, Sixty-second Congress, second session.]

A BILL To reduce the duties on wool and manufactures of wool.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That on and after the first day of January, nineteen hundred and thirteen, the articles hereinafter enumerated, described, and provided for shall, when imported from any foreign country into the United States or into any of its possessions (except the Philippine Islands and the islands of Guam and Tutuila), be subjected to the duties hereinafter provided, and no others; that is to say:

1. On wool of the sheep, hair of the camel, goat, alpaca, and other like animals, and on all wools and hair on the skin of such animals, the duty shall be 20 per centum ad valorem.

2. On all noils, top waste, card waste, slubbing waste, roving waste, ring waste, yarn waste, burr waste, thread waste, garnetted waste, shoddies, mungo, flocks, wool extract, carbonized wool, carbonized noils, and on all other wastes and on rags composed wholly or in part of wool, and not specially provided for in this act, the duty shall be 20 per centum ad valorem.

3. On combed wool or tops and roving or roping, made wholly or in part of wool or camel's hair, and on other wool and hair which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, not specially provided for in this act, the duty shall be 25 per centum ad valorem.

4. On yarns made wholly or in part of wool, the duty shall be 30 per centum ad valorem.

5. On cloths, knit fabrics, felts not woven, and all manufactures of every description made, by any process, wholly or in part of wool, not specially provided for in this act, the duty shall be 40 per centum ad valorem.

6. On blankets and flannels, composed wholly or in part of wool, the duty shall be 30 per centum ad valorem: *Provided*, That on flannels composed wholly or in part of wool, valued at above 50 cents per pound, the duty shall be 45 per centum ad valorem.

7. On women's and children's dress goods, coat linings, Italian cloths, bunting, and goods of similar description and character, composed wholly or in part of wool, and not specially provided for in this act, the duty shall be 45 per centum ad valorem.

8. On clothing, ready-made, and articles of wearing apparel of every description, including shawls whether knitted or woven, and knitted articles of every description made up or manufactured wholly or in part, and not specially provided for in this act, composed wholly or in part of wool, the duty shall be 45 per centum ad valorem.

9. On webbings, gorings, suspenders, braces, bandings, beltings, bindings, braids, galloons, edgings, insertings, flouncings, fringes, gimps, cords, cords and tassels, ribbons, ornaments, laces, trimmings, and articles made wholly or in part of lace, embroideries and all articles embroidered by hand or machinery, head nets, nettings, buttons or barrel buttons or buttons of other forms for tassels or ornaments, and manufactures of wool ornamented with beads or spangles of whatever material composed, on any of the foregoing made of wool or of which wool is a component material, whether containing india rubber or not, the duty shall be 35 per centum ad valorem.

10. On Aubusson, Axminster, moquette, and chenille carpets, figured or plain, and all carpets or carpeting of like character or description, the duty shall be 40 per centum ad valorem.

11. On Saxony, Wilton, and Tournay velvet carpets,

figured or plain, and all carpets or carpeting of like character or description, the duty shall be 35 per centum ad valorem.

12. On Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, the duty shall be 30 per centum ad valorem.

13. On velvet and tapestry velvet carpets, figured or plain, printed on the warp or otherwise, and all carpets or carpeting of like character or description, the duty shall be 35 per centum ad valorem.

14. On tapestry Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, printed on the warp or otherwise, the duty shall be 30 per centum ad valorem.

15. On treble ingrain, three-ply, and all-chain Venetian carpets, the duty shall be 30 per centum ad valorem.

16. On wool Dutch and two-ply ingrain carpets, the duty shall be 25 per centum ad valorem.

17. On carpets of every description, woven whole for rooms, and Oriental, Berlin, Aubusson, Axminster, and similar rugs, the duty shall be 50 per centum ad valorem.

18. On druggets and bockings, printed, colored, or otherwise, the duty shall be 25 per centum ad valorem.

19. On carpets and carpeting of wool, flax, or cotton, or composed in part of any of them, not specially provided for in this act, and on mats, matting, and rugs of cotton, the duty shall be 25 per centum ad valorem.

20. Mats, rugs for floors, screens, covers, hassocks, bed sides, art squares, and other portions of carpets or carpeting, made wholly or in part of wool, and not specially provided for in this act, shall be subjected to the rate of duty herein imposed on carpets or carpeting of like character or description.

21. Whenever in this act the word "wool" is used in connection with a manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, goat, alpaca, or other like animals, whether manufactured by the woolen, worsted, felt, or any other process.

SECT. 2. That on and after the day when this act shall go into effect all goods, wares, and merchandise previously imported, and hereinbefore enumerated, described, and provided for, for which no entry has been made, and all such goods, wares, and merchandise previously entered without payment of duty and under bond for warehousing, transportation, or any other purpose, for which no permit of delivery

to the importer or his agent has been issued, shall be subjected to the duties imposed by this act and no other duty, upon the entry or the withdrawal thereof.

SECT. 3. That all acts and parts of acts in conflict with the provisions of this act be, and the same are hereby, repealed. This act shall take effect and be in force on and after the first day of January, nineteen hundred and thirteen.

VIEWES OF THE REPUBLICAN MINORITY.

The report of the protectionist minority of the Committee on Ways and Means, published simultaneously with the majority report, was as follows :

The very able and complete report of the Tariff Board on wool was presented to the House on the 20th of December last. The majority members of the Committee on Ways and Means have had it now for over three months for deliberation, and it is to be presumed that it has been read by some of them, at least. Upon the facts contained in this report it seems that they are not able to make any changes in the bill heretofore introduced in the House by the chairman of that committee. They have again brought that bill into the House as the best that the party they represent is able to present on the subject of a tariff on wool. They have apparently settled down upon the conviction that no amount of information is of any avail in the formation of a Democratic tariff bill for revenue only.

The minority of the committee have, however, framed a bill based upon the facts set forth in the report of the Tariff Board, a copy of which bill is attached to these views, and which the minority have offered in committee as a substitute, and also propose to offer in the House. The report of the Tariff Board has been read through carefully, and the duties fixed in this bill are based upon the report of the Board.

The minority of the committee have endeavored to adjust the rates in accordance with the doctrine of protection by prescribing a duty equivalent to the difference in the cost of production at home and abroad as found by the Board. In fixing the rate of duty upon wool they have adopted the system of a specific duty per pound upon the clean content of the wools. This plan of a duty upon the clean content of the wools was first suggested by a Republican member of the Committee on Ways and Means more than three years ago, and an investigation was had to endeavor to carry it into

effect because of the suggestion made then. The Tariff Board took up the investigation of the subject, and their report shows in the most conclusive way why an ad valorem rate on wool should not be adopted.

The argument in brief is:

If the basic idea of the duty on wools is to give the domestic grower permanent protection, it should remain as uniformly effective as possible under all changes of foreign conditions. Ad valorem duties would not accomplish this, being ineffective in times of overproduction and low prices abroad and giving an unnecessarily high protection in times of scarcity and high prices in foreign countries.

In this view they are in harmony with every Secretary of the Treasury except Walker, and with every foreign government.

The method recommended by them of a duty on the clean content and adopted in this bill is fair, practical, equitable, and easy of enforcement. There is no difficulty in arriving at the clean content in any package of wool. Such a duty avoids all the inequities growing out of the present system of a pound rate upon wool in the grease increased and multiplied to equalize the duty in the various stages of its manufacture. There is no equalization in the present system, while there is absolute equality when the duty on the clean content is adopted. The method of ascertainment is simple and absolutely correct. With all the defects pointed out in the ad valorem system and all the merits in this system we are led to wonder why the latter was not adopted by the majority of the committee. Why should they run the risk of destroying any industry by duties grossly inadequate when they have ample and correct data?

We have divided wools into two instead of three classes, uniting former Class I and Class II into Class I in this bill and making Class III Class II of this bill. There is no reason why there should be any distinction in a tariff bill between the first two classes. We have fixed the rate of duty on Class I of this bill at 18 cents per pound on the clean content of the wool. This measures the difference between the cost of production at home and abroad on nearly all the wool imported and the bulk of the wool grown in the United States, especially in the Western States.

Under the present law our imports have been largely confined to raw wools, which produce the largest percentage of scoured wool. Under the "skirting clause" all but the very best wool in the fleece was cut out and much of the Austra-

lian and South American wools imported into the United States produced a much larger percentage of clean wools than those imported into Great Britain and Germany. We were cut off from the importation of a large class of wools which were very valuable for use in manufacture, but were also so conditioned that our people could not afford to pay the duty of 11 or 12 cents per pound upon the large amount of dirt included in the natural fleece. This bill opens the wool markets of the world to us and still preserves the home market for the American producer.

In the various manufactures of wool we have been able to correct the inequitable duties put upon wool in the present law. In other words, the compensatory rates in the present law are out of proportion to the necessary rates on the amount of wool used in manufacture. Under our proposed bill, by the aid of the Tariff Board's report, we have been able to fix with a high degree of accuracy the actual amount of clean wool used in the article manufactured and the waste incurred in manufacture, so that the various specific duties that we have placed upon yarns, cloths, and clothing represent only the actual amount of wool consumed in the various manufacturing processes. There will be no difficulty in administering this part of the law. All vegetable fibers can be easily removed from the wool by carbonization. The amount of wool actually used, even in a suit of clothes, can be determined with great accuracy at the custom-house. We have been abundantly assured of these facts by experts in the customs service. These processes will prevent the collection of a wool duty upon the cotton, so largely used in manufacturing cloths, and will make a radical reduction in the high ad valorem rates which resulted from the compensatory rates under the present law.

The Tariff Board's report was a revelation on the subject of conversion costs at home and abroad. The fiction in reference to the greater efficiency of the American laborer in the textile industries was most thoroughly exploded. The Board found that the English spinner was capable of producing a larger output than his American rival by reason of the fact that the maximum speed of the loom has been attained in England. The weekly wage was much less abroad. The thorough investigation by the Tariff Board of these questions, making so many comparisons of the cost, not alone of the weekly wage nor of piecework, but the cost of making goods in quantities of a thousand yards of the same quality in each instance in the United States and in Great Britain or France

justifies the conclusions of the Board. The tests reported prove absolutely that, generally speaking, taking into consideration experience, efficiency, wages, and every other element, the labor cost per yard in the United States is double that of the labor cost abroad. The Board used so many examples and reported upon them so clearly that it was not difficult to figure the duty necessary to compensate for the difference in cost at home and abroad of the conversion of wool into its various forms of manufactures. Upon the manufactured articles we have therefore taken the clean content duty upon the wool used and upon no other material used. Then we have added an ad valorem duty equal to the difference in conversion cost and the result has been a radical reduction in the rates, amounting on the average to 40 per cent.

On the goods made largely of cotton, which now enter so extensively into the woollen industry, the reduction of rates will be very marked. It would be impossible to show how great this reduction is until we have actual importations of these goods under this bill, if enacted into law, because we have now no report showing the amount of cotton admixture which pays duty as wool.

We have made the greater reduction of rates on the cheaper classes of goods. We have made a great reduction on combed wool, or tops, but we have put the actual specific pound duty on the wool used and a 5 per cent ad valorem, which will cover the difference in cost of conversion.

We have reduced the duty on woollen rags and flocks from 10 to 2 cents a pound. The 10 cents was placed there to exclude rags from abroad, the idea being that the rags coming in would contain infectious and disease germs and be undesirable; but it is found that 2 cents a pound will keep out all the old worn rags and let in at competitive rates only the rags from new cloth, such as the cuttings from tailor-made clothing and the like, a desirable product to use in the manufacture of cloth and clothing.

On the wools of Class II, carpet wools, we have made a radical change in the duties. Carpet wools are from the fleeces of native sheep which have not been improved by admixture of other blood, and of which none are now produced in this country. There is, therefore, from a protectionist point of view, no need for a duty on such wools. Its removal will interfere with no domestic industry. The objection urged to making these wools free of entry heretofore has been that some portions of some of the fleeces are used in manufacturing clothing. The percentage has been small, but to

guard against any use of such wools in making clothing we have provided that the duty shall be paid and a drawback shall be allowed upon proving that such wools have been consumed in the manufacture of carpets. This makes the wools free when manufactured into carpets and dutiable when used in making clothing.

The treatment of the two classes of wools in the Underwood bill and in the proposed substitute bill illustrates the difference in the two theories. We would put a duty upon the wools imported of Class I, of which we produce about three-fifths of our consumption, equal to the difference in cost in order to protect the growing of wool in this country. But where we do not produce the wool, as in Class II, and need it as material for manufacturing, we let it in free of duty. On the other hand, every bill introduced by the majority during this Congress has reduced the duty on the manufactured goods, when the article is produced in this country, to a point which generally cuts off American competition in our own markets. And if the material was not produced here and had to be imported, and was necessary for use in manufacturing, the majority have put a revenue duty upon the material in order, avowedly, to cripple the manufacturer who uses such material. With free carpet wools we have greatly reduced the duty on carpets. The subject of the cost of converting wool into carpets was not treated in the report of the Tariff Board, but we have positive information that the reduced duties in the bill here presented will be sufficient to cover the difference in production cost at home and abroad.

When this bill of the majority, H.R. 11019, was presented to the House on the 6th of June last, the views of the minority contained the following, which we now reiterate:

"It is difficult to understand on any economic principle why this bill is pressed just at this time. We have a Tariff Board at an annual expense of \$250,000, which has been engaged for several months in the investigation of Schedule K, and we are assured that this Board will be ready to report fully on the 1st of December next. The wool schedule is difficult and intricate, and directly involves the welfare and living of more than a half million people. Changes, when made, should be with the greatest care and study and with all the intelligent aid we can muster.

"Without any hearings or new data, with no information later than that of two years ago, this bill is forced upon the House at the mandate of a political caucus. There can be

no expectation that it will pass the other House or be even considered there before December next, at least.

"The bill itself is unlike any legislation ever attempted on this subject, and is a radical departure from all party platforms and economic principles.

"The only reason or excuse for the existence of this bill is that given by the Democratic caucus in their resolution. As the caucus seems to be the only body doing any legislating at this time, the action taken at the time it put this bill upon its passage must be taken as expressing the views of the majority. The caucus resolution was passed along with the adoption of this bill, and was put into the Congressional Record at the same time the bill was introduced in the House. The caucus edict has also gone forth that no amendment will be allowed in the House. The caucus is supreme, the House is its weak echo.

"The caucus resolution tells us that this bill 'is not to be construed as the abandonment of any Democratic policy,' but in view of 'the depleted and depleting condition of the Public Treasury — a result of Republican extravagance — a tariff of 20 per cent ad valorem on raw wool is now proposed as a revenue necessity.'

"'Revenue necessity' is the only reason so far given for this tariff on raw wool.

"The statement as to the condition of the Treasury here given is absolutely false, as proven by Treasury daily statement. On May 31, the day before this caucus, there was an actual surplus of receipts over disbursements for the past eleven months of the fiscal year which will end on the 30th day of this month of June of \$6,875,914.37. One year ago, on May 31, 1910, there was a deficit for the like period of eleven months of \$13,275,110.35. The Treasury was not depleted, but was better off by \$20,151,024.72 on the date of the caucus than on the same day in 1910. This gain has increased daily since, and is now about \$22,000,000.

"The Secretary's report made in December last shows a surplus of receipts over expenditures at the close of the year June 30, 1910, of \$15,806,328.94.

"On this same basis, with corporation-tax receipts coming in, the surplus on June 30, next, for the year will be more than \$36,000,000.

"In the words of the most distinguished Democratic leader :

"'Let no Democratic advocate of a tax on wool masquerade behind the pretence that he is voting for a revenue

tariff; let him not add hypocrisy to the sin he commits against his party.'

"The bill is not drawn on lines for the production of revenue on raw wool. With a duty of 20 per cent on wool the duty on manufactured cloth is too low to enable our manufacturers to pay the wool duty and still compete with imported cloths. The bill is much worse than the Wilson for the weavers of cloth. Under that the wool was free and the duties on woollens greater. What wool came in would come as cloths under this bill.

"But the mills here on most lines must soon close, and the farmer, unable to find market for his wool, must destroy his flocks. The experience under the Wilson bill demonstrates this.

"This bill was printed for the use of the caucus, together with some statistics, which we are promised will appear in the committee report.

"On page 22 of the caucus print appears a summary of estimated imports and duties, from which we extract:

ITEMS.	Results Under Present Law for Year End- ing June 30, 1910.	Estimated Results for 12-month Period Under Proposed Law.	Increase.
Raw wool, imports	\$47,687,293.20	\$66,991,000.00	\$19,293,706.80
Manufactures of wool, imports	23,057,357.78	63,831,000.00	40,773,642.22

Value per pound, \$0.186.

"Dividing the above increase in imports of raw wool (\$19,293,706.80) by the value given (\$0.186 per pound), we have an increased import of raw wool, estimated by this committee in weight of 103,800,000 pounds.

"The above increase in fabrics imported was \$40,773,642.22, of which 60 per cent is estimated to be the value of the wool to make the fabrics — \$24,464,185.33.

"The fabric is estimated at \$1 per pound, and it takes $3\frac{1}{2}$ pounds of wool in the fleece to make a pound of cloth. Multiplying the above by $3\frac{1}{2}$ we have a result of pounds of raw wool of 85,621,147.60; a total of wool imports equivalent to 189,421,147 pounds, which is equivalent to 60 per cent of the annual production of domestic wool, averaging less than 315,000,000 pounds.

"We do not care to go into the many objections to this bill which we might urge.

“For purely political reasons this cold-blooded measure is brought forward. If it could become a law, it would slaughter the sheep as in 1894 and close the mills much more universally.”

Instead of the deficit in the revenues for the fiscal year ending June 30, 1911, predicted by the chairman of the Committee on Ways and Means, the official reports show a surplus of \$47,234,377.10 — a pretty healthy showing for a “depleted and depleting condition of the Public Treasury.” The official returns up to date indicate a surplus of not less than \$35,000,000 for the present fiscal year. What new excuse will be invented now for a revenue duty on Schedule K cannot be conjectured until the majority report is seen.

We invite the majority to coöperate with us in passing the bill we present, and make a radical reduction now, instead of preventing a reduction by adhering to their bill on Schedule K.

In notes to the bill we append we have shown the changes of the rates from the present law in such instances as there is no change in classification.

SERENO E. PAYNE.

JOHN DALZELL.

S. W. MCCALL.

E. J. HILL.

J. C. NEEDHAM.

NICHOLAS LONGWORTH.

TEXT OF THE PAYNE-HILL BILL.

The bill offered by Republican members of the Committee on Ways and Means as a substitute for the Underwood bill was as follows:

[H.R. 22262, Sixty-second Congress, second session.]

A BILL To amend an act entitled “An act to provide revenue, equalize duties, and encourage the industries of the United States, and for other purposes,” approved August fifth, nineteen hundred and nine.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act entitled “An act to provide revenue, equalize duties, and encourage the industries of the United States, and for other purposes,” approved August fifth, nineteen hundred and nine, be, and the same is hereby, amended by striking out all of the paragraphs of Schedule K of Section 1 of said

act, from three hundred and sixty to three hundred and ninety-five, inclusive of both, and inserting in place thereof the following:

1. All wools, hair of the camel, goat, alpaca, and other like animals shall be divided, for the purpose of fixing the duties to be charged thereon, into the two following classes:

2. Class I, that is to say, merino, mestiza, metz, or metis wools, or other wools of Merino blood, immediate or remote, Down clothing wools, and wools of like character with any of the preceding, including Bagdad wool, China lamb's wool, Castel Branco, Adrianople skin wool or butcher's wool, and such as have been heretofore usually imported into the United States from Buenos Aires, New Zealand, Australia, Cape of Good Hope, Russia, Great Britain, Canada, Egypt, Morocco, and elsewhere, and Leicester, Cotswold, Lincolnshire, Down combing wools, Canada long wools, or other like combing wools of English blood, and usually known by the terms herein used, and all wools not hereinafter included in Class II, and also the hair of the camel, Angora goat, alpaca, and other like animals.

NOTE. — This paragraph includes paragraphs 1 and 2 of the present law.

3. Class II, that is to say, Donskoi, native South American, Cordova, Valparaiso, native Smyrna, Russian camel's hair, and all such wools of like character as have been heretofore usually imported into the United States from Turkey, Greece, Syria, and elsewhere, excepting improved wools hereinafter provided for.

4. The standard samples of all wools, which are now or may be hereafter deposited in the principal custom-houses of the United States under the authority of the Secretary of the Treasury, shall be the standards for the classification of wools under this act, and the Secretary of the Treasury is authorized to renew these standards and to make such additions to them from time to time as may be required, and he shall cause to be deposited like standards in other custom-houses of the United States when they may be needed.

5. Whenever wools of Class II shall have been improved by the admixture of Merino or English blood, from their present character, as represented by the standard samples now or hereafter to be deposited in the principal custom-houses of the United States, such improved wools shall be classified for duty as Class I.

6. If any bale or package of wool or hair specified in this act, invoiced or entered as of Class II, or claimed by the importer to be dutiable as of Class II, shall contain any wool or hair subject to the rate of duty of Class I, the whole bale or package shall be subject to the rate of duty chargeable on wool of Class I; and if any bale or package be claimed by the importer to be shoddy, mungo, flocks, wool, hair, or other material of any class specified in this act, and such bale contain any admixture of any one or more of said materials, or of any other material, the whole bale or package shall be subject to duty at the highest rate imposed upon any article in said bale or package.

7. The duty on all wools and hair of Class I, if imported in the grease, shall be laid upon the basis of its clean content. The clean content shall be determined by scouring tests, which shall be made according to regulations which the Secretary of the Treasury may prescribe. The duty on all wools and hair of Class I imported in the grease shall be 18 cents per pound on the clean content, as defined above. If imported scoured, the duty shall be 19 cents per pound.

NOTE.—Present law, duty on wool in the grease, Class I, 11 cents; Class II, 12 cents per pound; this bill, 18 cents per pound on the clean content.

8. The duty on all wools of Class II, including camel's hair of Class II, imported in their natural condition, shall be 7 cents per pound. If scoured, 19 cents per pound: *Provided*, That on consumption of wools of Class II, including camel's hair, in the manufacture of carpets, druggets and bockings, printed, colored, or otherwise, mats, rugs for floors, screens, covers, hassocks, bedsides, art squares, and portions of carpets or carpeting hereafter manufactured or produced in the United States in whole or in part from wools of Class II, including camel's hair, upon which duties have been paid, there shall be allowed to the manufacturer or producer of such articles a drawback equal in amount to the duties paid less 1 per centum of such duties on the amount of the wools of Class II, including camel's hair of Class II, contained therein; such drawback shall be paid under such rules and regulations as the Secretary of the Treasury may prescribe.

NOTE.—Present law, when valued at not over 12 cents a pound, 4 cents per pound; when valued at over 12 cents a pound, 7 cents a pound. The above provision makes these wools free of duty when used in the manufacture of carpets.

9. The duty on wools on the skin shall be 2 cents less per pound than is imposed upon the clean content, as provided for wools of Class I, and 1 cent less per pound than is imposed upon wools of Class II imported in their natural condition, the quantity to be ascertained under such rules as the Secretary of the Treasury may prescribe.

10. Top waste and slubbing waste, 18 cents per pound.

NOTE. — Present law, 30 cents per pound; this bill, 18 cents per pound.

11. Roving waste and ring waste, 14 cents per pound.

NOTE. — Present law, 30 cents per pound; this bill, 14 cents per pound.

12. Noils, carbonized, 14 cents per pound.

13. Noils, not carbonized, 11 cents per pound.

NOTE. — Present law, all noils 20 cents per pound; this bill, noils, carbonized, 14 cents per pound; not carbonized, 11 cents per pound.

14. Garnetted waste, 11 cents per pound.

NOTE. — Present law, 30 cents per pound; this bill, 11 cents per pound.

15. Thread waste, yarn waste, and wool wastes not specified, $9\frac{1}{2}$ cents per pound.

NOTE. — Present law, 20 cents per pound; this bill, $9\frac{1}{2}$ cents per pound.

16. Shoddy, mungo, and wool extract, 8 cents per pound.

NOTE. — Present law, shoddy, 25 cents per pound; mungo, 10 cents per pound; wool extract, 20 cents per pound; this bill, 8 cents per pound.

17. Woolen rags and flocks, 2 cents per pound.

NOTE. — Present law, 10 cents per pound; this bill, 2 cents per pound.

18. Combed wool or tops, made wholly or in part of wool, or camel's hair, 20 cents per pound on the wool contained therein, and in addition thereto 5 per centum ad valorem.

NOTE. — Present law, tops valued at not over 20 cents per pound, $24\frac{3}{4}$ cents per pound and 30 per cent ad valorem; valued over 20 cents a pound, $36\frac{3}{4}$ cents per pound and 30 per cent ad valorem; this bill, all tops 20 cents per pound and 5 per cent ad valorem.

19. Wool and hair which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, but less advanced than yarn, not specially provided for in this section, 20 cents per pound on the wool contained therein, and in addition thereto 8 per centum ad valorem.

NOTE. — Present law, valued at not more than 40 cents a pound, 33 cents per pound and 50 per cent ad valorem; valued above 40 cents and not above 70 cents, 44 cents per pound and 50 per cent ad valorem; valued at over 70 cents, 44 cents per pound and 55 per cent ad valorem; this bill, 20 cents per pound and 8 per cent ad valorem.

20. On yarns, made wholly or in part of wool, valued at not more than 30 cents per pound, the duty shall be $21\frac{1}{2}$ cents per pound on the wool contained therein, and in addition thereto 10 per centum ad valorem.

NOTE. — Present law, $27\frac{1}{2}$ cents per pound and 35 per cent ad valorem; this bill, $21\frac{1}{2}$ cents per pound and 10 per cent ad valorem.

Valued at more than 30 cents and not more than 50 cents per pound, $21\frac{1}{2}$ cents per pound on the wool contained therein, and in addition thereto 15 per centum ad valorem.

NOTE. — Present law, $38\frac{1}{2}$ cents per pound and 40 per cent ad valorem; this bill, $21\frac{1}{2}$ cents per pound and 15 per cent ad valorem.

Valued at more than 50 cents and not more than 80 cents per pound, $21\frac{1}{2}$ cents per pound on the wool contained therein, and in addition thereto 20 per centum ad valorem.

NOTE. — Present law, $38\frac{1}{2}$ cents per pound and 40 per cent ad valorem; this bill, $21\frac{1}{2}$ cents per pound and 20 per cent ad valorem.

Valued at more than 80 cents per pound, $21\frac{1}{2}$ cents per pound on the wool contained therein, and in addition thereto 25 per centum ad valorem.

NOTE. — Present law, $38\frac{1}{2}$ cents per pound and 40 per cent ad valorem; this bill, $21\frac{1}{2}$ cents per pound and 25 per cent ad valorem.

21. On cloths, knit fabrics, flannels, felts, and all fabrics of every description made wholly or in part of wool, not specially provided for in this section, valued at not more than 40 cents per pound, the duty shall be 25 cents per pound on

the wool contained therein, and in addition thereto 30 per centum ad valorem.

NOTE. — Present law, 33 cents per pound and 50 per cent ad valorem ; this bill, 25 cents a pound and 30 per cent ad valorem.

Valued at more than 40 cents and not more than 60 cents per pound, 26 cents per pound on the wool contained therein, and in addition thereto 35 per centum ad valorem.

NOTE. — Present law, 44 cents per pound and 50 per cent ad valorem ; this bill, 26 cents per pound and 35 per cent ad valorem.

Valued at more than 60 cents and not more than 80 cents per pound, 26 cents per pound on the wool contained therein, and in addition thereto 40 per centum ad valorem.

NOTE. — Present law, valued at more than 60 cents and not above 70 cents, 44 cents a pound and 50 per cent ad valorem ; valued at more than 70 cents and not more than 80 cents, 44 cents per pound and 55 per cent ad valorem ; this bill, 26 cents per pound and 40 per cent ad valorem.

Valued at more than 80 cents and not more than \$1 per pound, 26 cents per pound on the wool contained therein, and in addition thereto 45 per centum ad valorem.

NOTE. — Present law, 44 cents a pound and 55 per cent ad valorem ; this bill, 26 cents per pound and 45 per cent ad valorem.

Valued at more than \$1 and not more than \$1.50 per pound, 26 cents per pound on the wool contained therein, and in addition thereto 50 per centum ad valorem.

NOTE. — Present law, 44 cents per pound and 55 per cent ad valorem ; this bill, 26 cents per pound and 50 per cent ad valorem.

Valued at more than \$1.50 per pound, 26 cents per pound on the wool contained therein, and in addition thereto 55 per centum ad valorem.

NOTE. — Present law, 44 cents per pound and 55 per cent ad valorem ; this bill, 26 cents a pound and 55 per cent ad valorem.

22. On blankets and flannels for underwear composed wholly or in part of wool, valued at not more than 40 cents per pound, the duty shall be $23\frac{1}{2}$ cents per pound on the wool

contained therein, and in addition thereto 20 per centum ad valorem.

NOTE. — Present law, 22 cents per pound and 30 per cent ad valorem; this bill, $23\frac{1}{2}$ cents per pound on the wool content and 20 per cent ad valorem.

Valued at more than 40 cents and not more than 50 cents per pound, $23\frac{1}{2}$ cents per pound on the wool contained therein, and in addition thereto 25 per centum ad valorem.

NOTE. — Present law, 33 cents per pound and 35 per cent ad valorem; this bill, $23\frac{1}{2}$ cents per pound on the wool content and 25 per cent ad valorem.

Valued at more than 50 cents per pound, $23\frac{1}{2}$ cents per pound on the wool contained therein, and in addition thereto 30 per centum ad valorem.

NOTE. — Present law, 33 cents per pound and 40 per cent ad valorem; this bill, $23\frac{1}{2}$ cents per pound on the wool content and 30 per cent ad valorem.

Flannels pay the same duty as women's dress goods, coat linings, etc., and are rated in yards and not in pounds.

Provided, That on blankets over three yards in length the same duties shall be paid as on cloths.

23. On ready-made clothing and articles of wearing apparel, knitted or woven, of every description, made up or manufactured wholly or in part and composed wholly or in part of wool, the rate of duty shall be as follows:

If valued at not more than 40 cents per pound, the duty shall be 25 cents per pound on the wool contained therein, and in addition thereto 35 per centum ad valorem.

If valued at more than 40 cents and not more than 60 cents per pound, 26 cents per pound on the wool contained therein, and in addition thereto 40 per centum ad valorem.

If valued at more than 60 cents and not more than 80 cents per pound, 26 cents per pound on the wool contained therein, and in addition thereto 45 per centum ad valorem.

If valued at more than 80 cents and not more than \$1 per pound, 26 cents per pound on the wool contained therein, and in addition thereto 50 per centum ad valorem.

If valued at more than \$1 and not more than \$1.50 per pound, 26 cents per pound on the wool contained therein, and in addition thereto 55 per centum ad valorem.

If valued at more than \$1.50 per pound, 26 cents per

pound on the wool contained therein, and in addition thereto 60 per centum ad valorem.

24. On all manufactures of every description made wholly or in part of wool, not specially provided for in this section, the duty shall be 26 cents per pound on the wool contained therein, and in addition thereto 50 per centum ad valorem: *Provided*, That if the component material of chief value in such manufactures is wood, paper, rubber, or any of the baser metals, the duty shall be 26 cents per pound on the wool contained therein, and in addition thereto 35 per centum ad valorem, and if the component material of chief value in such manufactures is silk, fur, precious or semi-precious stones, or gold, silver, or platinum, the duty shall be 26 cents per pound on the wool contained therein, and in addition thereto 55 per centum ad valorem.

25. On hand-made Aubusson, Axminster, Oriental, and similar carpets and rugs, made wholly or in part of wool, the rate of duty shall be 50 per centum ad valorem; on all other carpets of every description, druggets and bockings, printed, colored, or otherwise, mats, rugs for floors, screens, covers, hassocks, bedsides, art squares, and portions of carpets or carpeting made wholly or in part of wool the duty shall be 30 per centum ad valorem.

26. Whenever, in any schedule of this act, the word "wool" is used in connection with a manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, goat, alpaca, or other animal, whether manufactured by the woollen, worsted, felt, or any other process.

27. The foregoing paragraphs, providing the rates of duty herein for manufactures of wool, shall take effect on the first day of January, nineteen hundred and thirteen.

NOTE. — The rates given above do not show the full change in the duty, because under the present law the duty per pound is applicable to the weight only on the amount of scoured wool consumed in the manufacture. The same applies to clothing, but in a still greater degree, so that no comparison with the pound and ad valorem rates is made under that paragraph.

THE UNDERWOOD BILL BEFORE THE HOUSE. •

On March 29 Chairman Underwood called up his wool and woollen bill for consideration in the House of Representatives. Mr. Underwood attacked the Tariff Board, criticising the members of the Board as men who have had no expert knowledge of tariff matters and no experience that would aid them in reaching correct conclusions on the tariff questions before Congress. There was no really valuable information in the report of the Tariff Board that was not well known long before there was a Tariff Board, Mr. Underwood continued. The method that Congress had pursued for one hundred years was far preferable. Under the old method of securing facts followed by the Ways and Means Committee three years ago, the manufacturer appeared and was subjected to cross-examination. To-day Congress had the report of the Tariff Board from manufacturers unknown and unknowable, and was asked to take their conclusions.

The majority of the Committee on Ways and Means entirely rejected the view that the theory of comparative costs of production furnished a guide to the rates of duty to be prescribed in a tariff bill. The Tariff Board report represented the views of the President of the United States, who had said that he favored such a revision of the tariff as would equal the difference in the cost of production at home and abroad, together with a reasonable profit to the American manufacturer. Democrats did not approach tariff revision from the viewpoint of the President and his Tariff Board. "We on this side of the House," declared Chairman Underwood, "do not believe a tariff should be levied for the purpose of protection. We do not believe it is right that the manufacturers be guaranteed a 'reasonable profit' by tariff legislation. We would levy tariff duties at such rates as would supply the government with its required revenue — no more and for no other purpose."

Chairman Underwood criticised the proposed substitute bill of the Republican minority. He attacked the 18-cent rate on the clean content of wool as indefensible from every

standpoint, whether of price, cost of production, or any other that had thus far been advanced, and an attempt to mislead the public into believing that an actual reduction was being made in the duties on wool. He charged that the duties were actually advanced from four cents a pound to seven cents a pound, an increase of 75 per cent on carpet wools used in the manufacture of the cheap clothing of poor people. "You continue exactly what you did in your old bill," Chairman Underwood asserted to the Republicans. "You put a high rate on the cheaper grade of goods, making it 105 per cent. One hundred per cent would include the entire cost of production, and yet you get above the entire cost of production for the poorer class of goods and put 5 per cent ad valorem additional on it, and when you come to the high grade goods that only the wealthy can wear you reduce the tax to 49.72 per cent, and ask the people to take that as a relief from the burdens of the present law. . . . Instead of making a reduction to the American people on the things that they actually wear, the things they carry on their backs, of 40 per cent, you make a reduction of the difference between 94 per cent and 71 per cent, or 23 per cent. That is the truth. That is the real fact in the case. On the other hand, our bill works out 41.88 per cent."

ADDRESS OF REPRESENTATIVE HILL.

Hon. E. J. Hill, of Connecticut, in his speech replying to Chairman Underwood, urged that the bill presented by Mr. Payne was in accord with the report of the Tariff Board. He attacked the assertion of Mr. Underwood that the price of the corresponding or competing American fabric was increased by the amount of the duty. This was the theory on which all Democratic tariff legislation had been framed, the theory on which magazine writers had based sensational attacks on Schedule K, the theory on which free traders had denounced the protective system. Mr. Hill quoted the figures given by the Tariff Board to the effect that the average duty on sixteen samples of English goods was 184 per cent, while the actual excess of the domestic price over

the foreign price on such fabrics was only about 67 per cent. This meant that the average duty on those sixteen samples was in part unnecessary and ineffective under the present law, but it also meant that the revenue rate of the Underwood bill would destroy the woolen industry here or compel a complete reorganization of labor conditions.

The purpose of the Republican bill was to provide rates of duty which should give to the growing and manufacturing of wool in this country a true protection measured by the difference in the cost of production here and abroad, and in fixing such rates reliance had been placed on the findings of the Tariff Board. The proposed duty of 18 cents a pound on the clean content of the wool was equal to $7\frac{1}{2}$ cents a pound on wool in the grease. Eighteen cents a pound on the clean content of a pound of wool measured the difference in the average cost of the wool produced in the United States and in competing countries, and gave the American producer a much safer and more reliable protection than he has now. The report of the Tariff Board would not justify a lower duty than 15 cents or a higher one than 17 cents.

Mr. Hill added that in his opinion an ad valorem duty on wool was theoretically the best method of applying the duty, but it presupposed matching the talent, ability, and experience of the importer with an equal talent, ability, and experience, supplemented by inflexible honesty and integrity, in every member of the appraising force, and that meant paying salaries in the appraisers' stores equal to those paid for profit in private business. There was no hope of that, however, and the probability of undervaluations would be so great that the experiment would be a losing one. A specific duty on the clean content of wool subjected every importation to uniform treatment so far as actual quantity was concerned, did away with the payment of duties on grease and dirt, made certain the collection of duties as intended by the law, wiped out the discriminations and crudities of the present method, and would tend very greatly to standardize the importation of wools. The necessary sampling and testing could be done at a trivial expense. The

advantage to trade of having all clothing and combing wools bought and sold on a government certificate of their clean content would be very great.

Mr. Hill discussed in detail the various paragraphs of the Payne-Hill bill. He believed that the overwhelming majority of the people were sincere protectionists, and that in any case where a high rate was shown to be necessary to meet the difference in the cost of foreign and domestic production they were willing to give it. He believed that the political party which advocated that policy was bound to win, not only in the next election but for the next quarter of a century at least. But it was necessary to prove that the rates were written fairly and squarely, and that the "jokers" were eliminated from our tariff law. No one party was responsible for them. The tariff of 1894 was officially branded by the President as perfidy and dishonor, and other tariffs bore evidence of mutilation in their tedious journey to the statute books. There were no "jokers" in this Republican bill.

The avowed and only purpose of the Democratic majority of the committee was to tax importations to raise revenue and encourage importations in order to increase receipts. A single ad valorem rate if put low enough would do this, and the importations would steadily increase as the industry gradually disappeared. With the many thousands of styles and weights and varieties of woolen fabrics throughout the world, a single ad valorem rate must necessarily be unfair to the majority. The Democratic members of the committee recognized this in a slight degree in the case of flannels by making a duty of 30 per cent if valued at less than 50 cents per pound, and of 45 per cent if of higher value. They recognized the protective principle still more in the construction of their cotton bill by making a system of graded ad valorem duties on fabrics, and justified it in their report by the claim that increasing rates were needed because of increasing fineness of yarns, additional cost of bleaching, dyeing and printing, and general cost of advanced manufacturing processes. If this was true of cotton, why was it not more emphatically true of woolen fabrics? The Republican

bill recognized that principle, and graded the duties so that they represented the difference in the cost of conversion from wool to cloth and clothing between this country and England, which is our strongest competitor.

ADDRESS OF HON. FRANK B. WILLIS, OF OHIO.

Hon. Frank B. Willis, of Ohio, representing one of the great wool growing districts of the country, denounced the Underwood bill as extremely inimical to the interests of a large number of his people and not beneficial to any one. The bill if enacted would mean practically the destruction of the sheep industry, particularly in Ohio, Pennsylvania, and West Virginia. It was known to the farmers and sheepmen of the country that it was proposed to put wool upon the free list just as soon as that could be done. Mr. Willis discussed the skirting clause as a reason for the dissatisfaction of the wool growers with the present law. He was opposed to an ad valorem duty on wool because at the time when the world price of wool was low, and when wool growers needed protection most and manufacturers needed cheap wool least, under an ad valorem duty that was the time when wool would come in most freely. On the other hand, a specific duty would work just the reverse of an ad valorem duty. A system of ad valorem duties was like a rain-making machine that would work only in wet weather; like a stove that would burn only in July. For that reason the wool growers wanted a specific duty and wanted that specific duty levied on the basis of the scoured content.

The reason why this country could not successfully compete in the growing of wool was because of the larger labor cost per sheep. In the United States the average labor cost per sheep was 80 cents; in South America, 13 cents, and in Australia, 7 cents. That was for the labor outside of the cost of shearing the sheep. The labor cost of shearing in the United States was 9 cents; in Australia, 7 cents; in South America, 6 cents, and in Africa, 2 cents per sheep. The average monthly wages in the Transvaal were \$10; in Natal, \$4.87; in the Orange Free State, \$3.75, and in Rho-

desia as low as \$1.21. To feed a sheep in the United States cost the owner annually 45 cents per head; in South America, 35 cents; in Africa, 35 cents, and in Australia only 8 cents. Taxation in the United States was 5 cents per head on a sheep; in South America, 4 cents, and in Australia, $2\frac{1}{2}$ cents. The average charge for transporting one pound of grease wool from the Western station to the Eastern market in this country was 2 cents. From Australia to Boston it was $2\frac{1}{4}$ cents. On the basis of the scoured pound the freight on one pound of wool from the Western growers' railroad station to Boston was about 6 cents per pound; from Australia, 3 cents, and from South America, 1 cent. From the great pastures where the largest amount of wool was produced in this country the freight rates to the Boston market were vastly greater than from the sheep pastures of our great competitors. When the Panama Canal was finished and kept in our own control—not turned over to some great railroad corporation—railroad lines no longer could hold up the wool growers and other producers and shippers, and make them pay prices so exorbitant as almost to shut them out of the Boston markets. That would be one of the greatest benefits flowing from the completion of the Panama Canal.

Mr. Willis did not believe that the rate of duty on raw wool in the Republican bill was quite as high as it ought to be—the rate on the scoured pound. He quoted the Tariff Board figures to show that the difference in the cost of producing a pound of scoured wool between this country and Australasia was 24.2 cents per pound—but he was willing to concede something.

The wool grown in the Ohio region was the best grown anywhere in the world. The Australian fiber was lustrous and beautiful but not strong. Gentlemen said, let the Ohio wool growers go into some other branch of the sheep industry. But if the great merino flocks of Ohio were destroyed the wool industry of the world was crippled, because it was only by crossing the breeds, by using the crossbreds as a foundation and improving the stock by importations from the

Ohio flocks that the standard could be kept up. The wool raised in Australia owed its fineness and luster to imported blood from Ohio, and the Ohio flocks must be maintained if our country was to remain one of the great wool-producing nations.

ADDRESS OF EX-CHAIRMAN PAYNE.

Hon. Sereno E. Payne, of New York, former Chairman of the Committee on Ways and Means, in his speech on the wool and woollen measures expressed the opinion that there never were more people in this country who favored a protective tariff than at the present time — they did not favor an excessive or unnecessary protection, but they did favor duties high enough to make up the difference between the cost of production here and abroad. Mr. Payne spoke warmly in praise of the Tariff Board, and quoted the statement of Dr. Richard Schüller, of the Austrian Imperial Ministry of Commerce, that “The Tariff Board has come within a very short time to the head of all the similar boards established a long time since in the other countries.” Then Mr. Payne proceeded to severe criticism of the alleged “expert” of the Democratic majority of the Committee on Ways and Means who prepared the criticism of the Tariff Board report — a man who, according to Mr. Payne, “was never in a woollen or worsted mill for over a day, if at all; a newspaper correspondent, he for some years past has been engaged in writing sensational and abusive political despatches of a column a day or over to a New York journal.” “When the work of the Tariff Board started, this man, taking advantage of personal acquaintance with some employees of the Board, sought to eke out his newspaper despatches by inducing these acquaintances to violate their oaths of office not to disclose any information obtained for or prepared by the Tariff Board. When these facts became known he was forbidden access to the rooms of employees. Since that time, over a year ago and before the wool inquiry began, he has wired an attack on the Board to his paper almost daily.”

Mr. Payne goes into the details and shows paragraph by

paragraph how the "expert" criticism of the Tariff Board report was the product of inexact information or eccentric mathematics.

Mr. Payne urged the Democrats to vote for his proposed bill that did not give any excessive duty on wool in any shape, raw or manufactured, but that simply made up the difference in cost.

Representative Green, of Iowa, also attacked the "expert" examination of the Tariff Board report, and showed that in one of its important tables not one of the figures was correct, and that most of the figures were from 25 to 40 per cent out of the way. The man who prepared these figures, Mr. Green stated, was not employed by the Government, and "I doubt whether he was employed by the committee."

ADDRESS OF MR. MONDELL, OF WYOMING.

Hon. Frank W. Mondell, of Wyoming, spoke on the theme of "Democratic Hostility to the Wool Industry." The Democratic bill, with its ad valorem rate of only 20 per cent of the foreign value of imported wool, he said, would reduce the value of every pound of wool grown on American farms, and prohibit the growing of all wools of the finer grades. It carried such low rates on manufactures of wool as to close American mills and thus deprive the few growers of coarse wools who might survive of a market for their product. He would support the Republican bill not because he thought all its rates were safely protective, but because he believed it was the best measure of protection obtainable. He did not question the approximate accuracy of the rate fixed on wool, 18 cents per pound on the scoured content of imported fleeces, and amounting to about 36 per cent ad valorem on the present foreign cost, as measuring the average difference in the cost of producing wool at home and abroad, as shown by the Tariff Board. But he urged that it should be borne in mind that any rate based on averages might leave a considerable portion of the product without adequate protection, and the portion of the national wool clip thus left somewhat in jeopardy was the portion which came largely from the

region which he represented. Furthermore, the Tariff Board had not taken into consideration the differences in interest charges in the cost of transporting wool to market, and the matter of investment in lands.

There were some excellent things about the Republican bill. The form of the wool duty was the correct one — the only fair and equitable method of adjusting duties on wool. It was in such a form that American wool growers would get the benefit of the full amount of the duty. If they had the actual protection which in theory they have under the present law, it would be very much higher than the present bill, but they never had had a protection of 33 cents on the scoured pound, the theory of the present law. The protection had been on the average, when there was not too much agitation, an actual rate of between 7 and 8 cents on the grease pound.

Mr. Mondell criticised the rate carried in the Republican bill on noils and waste as rather too low. The rate on tops he thought was too low also. The wool growers were quite as much interested in the rate on tops and noils as in the rate on wool, because if these rates were by comparison lower than the wool rates, tops and noils would be largely imported and the actual protection lowered.

Mr. Mondell characterized the report on the Democratic bill as in some respects the most amazing document he had ever read — a combination of fiction, garbled figures, lame logic, and misstatements of fact. He could not believe that the fourteen majority members of the Ways and Means Committee had ever read it, for he could not conceive how it was possible that any intelligent man could ever read that document and put his name to it. The man who wrote it did not know what he was writing about, and the men who signed it ought to be ashamed of themselves. The fact was that the Democratic majority started out last year with the free traders in full control and insistent on free wool. But the clamor of wool-producing Texas and the Ohio Valley caused them to halt. They excused their departure from free trade in wool on the fiction of a depleted treasury.

All of the regions in which the Tariff Board reported a high charge against the fleece were regions where a large number of sheep were produced. Where there were but few sheep to the farm the actual cost or apparent cost of producing the wool might be negligible. Where sheep were produced in large numbers and were an item of importance on the farm or ranch, the actual cost of care and maintenance was a matter of sufficient importance to demand and receive attention, and the flocks, not being mere incident to the general business, do require and receive attention the cost of which is appreciated, do consume feed the value of which is known and understood. So in the Ohio Valley where the flocks were of considerable size and the industry of large importance, the animals, whatever their breed, must have the care and attention of men paid good wages, must have feed which would otherwise be marketable. A change to crossbred sheep or to the straight, coarse-wool breeds would bring a larger return per animal in mutton but the return in wool would not be increased. The amount of feed consumed per animal would be increased, and the situation would not be far different from what it is now. In the Rocky Mountain region a shifting from the merino type to the coarse-wool sheep would be in the main impossible. In that region the great majority of the flocks were not under fence, but were herded on the open range. The merino was the only type of sheep that could be successfully herded in large bands. Coarse-wool sheep scatter hither and yon, break up into small bands and stray single, escaping from the herders and becoming the prey of predatory animals. Furthermore, the merino type was by far the best adapted to the dry summers, cold winters, and rough mountain passages of the region.

Even if the change could be made from the merino type in the Ohio Valley and the West to coarse-wool sheep, the change would be a national calamity. Not only did the merino type of sheep produce the only wool in the world that could be used for the manufacture of woollens, but it was essential for the finer grades of worsteds. American wool of merino blood, grown in the Ohio Valley, as well as some grown in the territorial regions, was the strongest fine wool in the world.

The army and navy did not insist on the use of American merino wool in the manufacture of cloth for uniforms for purely patriotic reasons, but because there was no wool in the world that would make cloths of such strength and wearing quality as the American merinos.

Hon. Atterson W. Rucker, a Democratic Representative from Colorado, attacked the Underwood bill in a vigorous speech, declaring that he could not support it and was utterly unable to understand how any Democrat could consistently support it. He stated also that the Republican bill was equally objectionable to it, for 34 cents a pound was exactly what the Western sheep grower must have in order to compete with the Australian wool grower.

Protests on behalf of the wool growers against the Underwood bill were also voiced by Representatives Switzer, of Ohio, and Crago, of Pennsylvania.

Speeches in favor of the Underwood bill were made by Representatives Andrew J. Peters, of Massachusetts; John A. Maguire, of Nebraska; Edward W. Townsend, of New Jersey; Choice B. Randell, of Texas; George F. O'Shaunessy, of Rhode Island; Finly H. Gray, of Indiana; Martin D. Foster, of Illinois; and Claude Kitchin, of North Carolina. Mr. Kitchin, a member of the Committee on Ways and Means, closed the debate. Mr. Kitchin denounced the Payne-Hill measure as a sham revision bill. He attacked the report of the Tariff Board and the "millionaire tariff mendicants" of Wyoming, Montana, Idaho, and Oregon. He declared that the House Republican bill increased the rates of duty on wool and gave the Western growers more protection than they had at present.

On April 1, general debate having been ended, ex-Chairman Payne moved to recommit the Underwood bill, with instructions to strike out all after the enacting clause and substitute the Payne-Hill bill. On this question the yeas were 104 and the nays 169. All of the Republicans voted for the Payne-Hill measure, with the one exception of Representative William Kent, a California "progressive." On the question of the passage of the Underwood bill the vote was yeas 190 and

nays 92 — only one Democrat, Representative William B. Francis, of Ohio, voting with the bulk of the Republicans against the bill, while twenty Republican insurgents, nearly all from Western States, voted with the Democrats in favor of the Underwood proposal. These insurgent Republicans so recorded were Representatives Akin, of New York; Anderson, Stevens, Lindbergh, Volstead, Miller, Nye, and Steener-son, of Minnesota; Hanna, of North Dakota; Haugen and Hubbard, of Iowa; Jackson, Murdock, and Young, of Kansas; Kent, of California; Norris, of Nebraska; Nelson, of Wisconsin; Lafferty, of Oregon, and La Follette and Warburton, of Washington. Thereupon the Underwood bill having passed the House was sent over to the Senate and referred to the Committee on Finance.

THE UNDERWOOD BILL IN THE SENATE.

On May 23 Senator Smoot, for the Committee on Finance, reported back adversely the Underwood bill H.R. 22195, to reduce the duties on wool and manufactures of wool, and stated that at an early day the majority members of the Finance Committee expected to report a wool bill to be offered as a substitute. Senator Heyburn, of Idaho, suggested that he was unaware of any authority given to promise legislation or submit proposed legislation in the nature of a new wool bill. Until the committee had prepared and agreed upon such a bill and had by a vote of the committee authorized it to be reported, he thought that no such promise as that of Senator Smoot should be made. He objected to having the party placed under a pledge or a promise that they would enter on the consideration of such a measure. Chairman Penrose, of the Committee on Finance, stated that the Senator from Utah was entirely correct, and that it was the hope of the majority of the members of the Finance Committee, if the limited time at their disposal would permit, to bring in a wool bill based on the report of the Tariff Board. Whether such a bill was likely to pass in the present condition of both branches of Congress was, of course, another question, but the Republican members of the

committee would feel that they had discharged their duty in submitting a measure based on the report of the Tariff Board.

The Democratic minority of the Committee on Finance, in a report submitted by Senator Simmons, of North Carolina, urged the adoption of the Underwood wool and woollen bill, and presented the arguments in favor of that measure contained in the House majority report.

Obituary.

ROYAL CHAPIN TAFT.

HON. ROYAL CHAPIN TAFT, of Providence, R.I., one of the oldest wool manufacturers in the United States, died on Tuesday, June 4, 1912, in his ninetieth year. Mr. Taft was a native of Northbridge, Mass., and like President William H. Taft a descendant in the seventh generation from Robert Taft, a native of Scotland, who settled in Mendon, Mass., in 1680. The Taft family has long been one of the most conspicuous in central Massachusetts. Royal C. Taft's grandfather Jacob served at Lexington, and was a sergeant at the battle of Bunker Hill.

Royal C. Taft passed his boyhood in the town of Uxbridge, and was graduated from Worcester Academy. When he reached twenty-one he entered business as a clerk in the office of Royal Chapin, a wool manufacturer and merchant of Providence. After five years he became a partner with Mr. Chapin, and in 1851 established his own independent business in a partnership with S. Standish Bradford, of Pawtucket, under the firm name of Bradford & Taft. This firm developed into one of the most important houses in its line of business in New England, Bradford & Taft becoming Bradford, Taft & Company, then Taft, Weeden & Company, and subsequently Taft & Weeden. For many years this firm owned and operated the famous Weybosset Woolen Mills in Olneyville, Providence. Mr. Taft's partner, William B. Weeden, was, like himself, a man of marked ability and strength of character, a historian and a writer on economic subjects. After a long and notable career Taft & Weeden sold the Weybosset Mills to the American Woolen Company, which now owns and controls the mills as a part of its extensive business.

Mr. Taft was long an influential factor in the banking and general mercantile activities of Providence. He was a member of the Finance Committee of the Rhode Island Hospital Trust Company, a director and president of the Merchants' National Bank, president of the Providence Gas Company, and vice-president of the Providence Institution for Savings. Mr. Taft was

for some years a director of the New York, New Haven & Hartford Railroad. He had served both as president and vice-president of the Providence Athenæum.

In politics Mr. Taft was first a Whig and afterwards an active Republican and earnest protectionist. He redeemed the State from Democratic control in 1888, when at the urging of his friends he became the Republican candidate for Governor. He declined in 1889 the honor of a renomination. In 1891 Mr. Taft received the honorary degree of Master of Arts from Brown University. He was a member of the Hope, Squantum, University and Agawam Hunt Clubs.

An important contribution to the history of the great industry with which he was long identified was made by Mr. Taft in "Some Notes on the Introduction of the Wool Manufacture into the United States," which was written in 1871 at the request of Hon. Horace Capron, then the Secretary of Agriculture in Washington. This paper, revised and expanded, was read by Mr. Taft before the Rhode Island Historical Society on April 18, 1882, and is published in full in Volume XII. of the quarterly Bulletin of the National Association of Wool Manufacturers. Mr. Taft, as a result of his researches, contended that Arthur and John Scholfield were the first wool manufacturers in this country — an opinion which all subsequent inquiry has confirmed.

Governor Taft married Miss Mary Frances Armington, of Pittsfield, Vt. His sons are Robert W. Taft and Royal C. Taft, Jr. The daughters are Mary E., wife of George M. Smith, and Miss Abbie F. Taft.

BENJAMIN F. MELLOR.

MR. BENJAMIN F. MELLOR, President of the Standish Worsted Company of Plymouth, Mass., died in the hospital at Milford, Mass., May 20, 1912. Mr. Mellor was an able and successful manufacturer, and was widely known and highly regarded in the trade. He was a native of Woonsocket, R.I., and when a young man entered the mills of the Hockanum Company at Rockville, Conn., as a designer. He was later promoted to a superintendency in the New England Company. Some years ago he removed to Plymouth, and in association with Mr. F. E. Anderson became an owner of the Standish Mills. In 1902 Mr. Anderson retired

and Mr. E. H. Dorr and Mr. J. D. Shields were taken into the concern.

The Standish Worsted Company greatly prospered under the presidency of Mr. Mellor, who until ill health overtook him was most industrious in his application to business affairs. For many years Mr. Mellor was an active member of the National Association of Wool Manufacturers.

He leaves a widow and four children — Mr. Albert Mellor, of Plymouth; Mrs. Edna Gowdy, of Springfield; Mrs. Louise Owings, of Boston, and Miss Ruth Mellor, a student at Smith College. His aged mother, Mrs. Nancy Mellor, of Boston, also survives him.

JACOB W. MACK.

MR. JACOB W. MACK, president of the Raritan Woolen Mills and the Somerset Manufacturing Company, of Raritan, N.J., died on April 11, 1912, at a private sanitarium, following an operation. Mr. Mack was born on February 25, 1845, in Fuerth, Bavaria. He came to this country as a youth in 1863, and after a year or two became associated with a large manufacturing clothing house in New York City. He remained with this house as confidential man until 1879, when he engaged in the mineral water business. In 1883 he entered into partnership with Nathan & Dreyfus, a firm which afterwards became the Nathan Manufacturing Company, makers of locomotive injectors, lubricators, etc. Mr. Mack retained until his death his connection with this concern, of which he was the secretary. At the death of his brother, whose executor he was, he was elected to the directorate of the Raritan Woolen Mills and the Somerset Manufacturing Company, and afterward became the president of both corporations. Mr. Mack was not only a capable merchant and manufacturer but a public-spirited citizen. His business career had been signalized by notable industry, sagacity, and perseverance. He was particularly interested in the education and industrial progress of the negro race, and had been serving as an officer of the Armstrong Association. Mr. Mack's New York home was at 127 West 75th Street.

Editorial and Industrial Miscellany.

THE GREAT STRIKE IN RETROSPECT.

LAWRENCE, ITS AFTERMATH OF INCREASED WAGES, AND THE I.W.W.

LONG remembered in the annals of the textile industry of America will be the great strike which prevailed in Lawrence, Mass., from January to March, 1912, and spread to manufacturing communities of adjacent States. Thus a winter and a spring of unrest and apprehension followed a year of severe depression in the textile business. It was that long depression and an outlook clouded by the reassembling of a tariff-smashing Congress that influenced the Massachusetts manufacturers to decline to advance their rate of wages when the new 54-hour law went into effect on January 1.

When the working week for women and minors had been reduced from 60 hours to 58, and again from 58 to 56, the manufacturers of the Bay State had generally lifted up their wage scale so that their employees had earned as much in the shorter as in the longer week. When the 54-hour bill was before the legislative committees it was plainly stated that this could not be done again; that business conditions would not warrant it. Nevertheless, it was apparently assumed by at least the non-English speaking employees in the Lawrence mills that an increase would once more be granted, and when it was not forthcoming strikes broke out in the principal Lawrence mills, accompanied at once by mob violence and attempted destruction of property. The 54-hour law was applicable all over Massachusetts, and was accepted everywhere else in the State without important objection or resistance.

It was manifest that the radical labor leaders who took charge of the strike had determined to make a test case of the Lawrence situation. Desperate methods of intimidation and coercion were adopted, and these compelled the State government to order a strong force of troops to Lawrence — the first time for many years that such a service had been required from the armed forces of the Commonwealth. There was not much flagrant dis-

order after the soldiery arrived, but there was much sinister, secret terrorism, and a considerable proportion of the employees were kept out of the mills, most of which, however, remained in operation. A special legislative committee of conciliation proved to be a factor of some value in bringing about the final agreements for a general advance in wages by which the strike was quelled. The strikers at the outset had demanded an even 15 per cent increase in wages for all employees, double pay for overtime, the abolition of the premium or bonus system wherever practised, and the return of all employees without prejudice. The actual increase granted ranged from about 15 per cent for the lowest-paid workers to 5 per cent for the skilled and well paid. A higher but not a double rate was given for overtime work, and the premium system was modified but not abandoned.

Actual, formal recognition was not given to the Industrial Workers of the World. The mill managers in every case refused to meet committees made up of any other than their own employees, though in some instances even this was hailed as a recognition of the anarchistic organization that had been a dominant spirit in the worst phases of the strike. The appearance of the Industrial Workers of the World in this Lawrence conflict, and subsequently in Lowell, Passaic, Barre, and elsewhere, is a dark omen for Lawrence and for all the other communities afflicted. This baleful organization is of European origin. Its view of the relation of employer and employee is the perverted Continental view that the man who pays wages and the man who receives them have no common interest whatever, but are bound to irreconcilable hostility. A fundamental principle of the Industrial Workers of the World is that all property belongs to the workers — meaning by this the manual workers — engaged in its production. "These mills are yours," Ettor, Haywood, and their ilk told the inflammable mob at Lawrence. "They are yours to operate or yours to destroy." Never has the underlying spirit of anarchism been more defiantly proclaimed in America.

Throughout the strike the mills in Lawrence and elsewhere were manufacturing goods for a bare market. There was a pronounced and constant demand for fabrics for immediate use. Temporarily at least the industry as a whole was fairly prosperous, because of the low production of the preceding year. There

was a real need of labor. This condition strengthened the hands of the agitators and enabled the strikers to secure concessions which a year before could not possibly have been granted, and have been granted now with undeniable hazard to the industry. Since the strike at Lawrence ended, the advance in wages given there has been substantially repeated in the other textile manufacturing communities of at least the northeast portion of the United States.

In the early weeks of the Lawrence conflict it was iterated and reiterated by the strikers and a certain element of the press that the average wages in the woolen and cotton mills were only \$6 or \$7 a week. This assertion even found its way into the editorial pages of respectable magazines, which subsequently made retraction. As a matter of fact, the average wages of men, women, and minors were more than \$9 a week, as was demonstrated by actual pay-rolls. The weak point of the Lawrence situation was that a certain number of men, recent immigrants from Southern Europe, ignorant of the industry and of the language, were earning from \$6 to \$7 a week. These apprentices, for such they were, were relatively few in number and by no means typical. But they served the purpose of the hour.

This conflict has been and will be made much use of by the forces of ignorance and hate against the textile schedules of the tariff law and the American system of protection. It has been and will be volubly asserted that the protective tariff in these industries fails to guarantee an "American wage rate" — a "living wage." These are mouth-filling phrases of admirable indefiniteness. But the clear, concrete fact is that all of the people, even the most unskilled, lowest paid people employed in American textile mills, receive not only on the average twice as much money every week, but *twice as much money for doing the same amount and kind of work* as employees in the most fortunate mills of Europe. On this point the following comparison drawn from page 826 of the Tariff Board report is eloquent:

142 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

OCCUPATIONS AND WEEKLY FULL-TIME EARNINGS IN THE UNITED STATES AND IN GREAT BRITAIN IN THE WOOLEN AND WORSTED INDUSTRY.

OCCUPATION.	Sex.	Kind of Work.	Average Full-time Earnings of 55.6 Hours.		Excess United States over Great Britain.
			United States.	United Kingdom.	
			Average Weekly Earnings.	Average Weekly Earnings.	
					<i>Per cent.</i>
Wool sorter	Male.	Time.	\$12.38	\$7.22	71.5
Do.	"	Piece.	13.42	7.71	74.1
Do.	Female.	Time.	9.71	. . .	. . .
Do.	"	Piece.	11.19	. . .	. . .
Wool washers, scourers, driers	Male.	Time.	8.21	4.93	66.5
Do.	"	Piece.	. . .	6.04	. . .
Card strippers and tenders	"	Time.	7.81	5.45	43.3
Comb tenders	"	"	7.85	4.26	84.3
Do.	Female.	"	6.52	3.00	117.3
Back-wash and gill-box minders	Male.	"	6.73	. . .	. . .
Do.	Female.	"	5.84	2.83	106.4
Drawing-frame tender	Male.	"	6.80	. . .	. . .
Do.	"	Piece.	8.39	. . .	. . .
Do.	Female.	Time.	6.21	2.68	131.7
Do.	"	Piece.	6.79	3.41	99.1
Wool spinners (mule)	Male.	Time.	10.40	5.98	73.9
Do.	"	Piece.	11.75	7.93	48.2
Warp dressers	"	Time.	12.94	6.53	98.2
Do.	"	Piece.	14.12	7.91	78.5
Worsted-frame spinners, Do.	Female.	Time.	7.40	. . .	. . .
Do.	"	"	6.40	2.25	184.4
Do.	"	Piece.	6.46	. . .	. . .
Reelers	"	Time.	5.46	2.94	85.7
Do.	"	Piece.	6.93	3.56	94.7
Winders	Male.	Time.	7.13	. . .	. . .
Do.	"	Piece.	7.75	. . .	. . .
Do.	Female.	Time.	5.53	2.66	107.9
Do.	"	Piece.	7.08	3.85	111.3
Woolen weavers	Male.	"	10.63	6.21	71.2
Do.	Female.	"	10.54	3.83	175.2
Worsted weavers	Male.	"	12.36	6.12	102.0
Do.	Female.	"	9.55	3.59	166.0
Burlers	"	Time.	6.15	3.20	92.2
Do.	"	Piece.	7.12	3.51	102.8
Menders	"	Time.	7.77	3.63	114.0
Do.	"	Piece.	9.19	4.30	112.2
General laborers	Male.	Time.	8.21	4.74	73.2

As to yarns, "the conversion cost of the same quality and count of yarns in the United States is about twice that in England," declares the Tariff Board. "The cost of turning yarn into cloth in the United States as compared with England is all the way from 60 per cent to 170 per cent higher, according to the character of the fabric." A fearful and wonderful thing is the logic of those persons who, denouncing the Lawrence wage rate as inhuman, demand the destruction of the protective sys-

tem without which Lawrence wages would be instantly reduced one-half. Such persons self-impeach either their own intelligence or their own sincerity.

WESTERN WOOL AND THE PANAMA CANAL.

A GREAT SAVING CERTAIN IN BOTH OCEAN AND RAILROAD FREIGHT RATES.

CONGRESS has recognized the near approach of the opening of the Panama Canal by actively considering legislation on the methods by which the great waterway is to be operated. Tolls have been set at a maximum of \$1.25 per ton, not of merchandise carried through, but of the net register of the ships themselves. This does not mean necessarily that the tolls will be \$1.25 a ton on merchandise. The exact amount is determined by the cargo capacity of the ship, but a ship does not always run full of cargo. In any case, however, a toll so high as \$1.25 per net registered ton would be an appreciable tax upon commerce, and it is just and gratifying that Congress has released entirely from the payment of tolls American vessels engaged in the coastwise or purely domestic trade between coast and coast, from which foreign vessels have always been excluded.

Free tolls to American coastwise ships are manifestly a benefit to shippers, producers, and consumers in America. This liberality of Congress will reduce the current rates of freight and increase the number of American coastwise ships available. It will naturally increase the volume of commerce passing through the canal, and assure a thoroughly energetic competition with the trans-continental railroads. A careful analysis of the subject of rail and ocean freights on raw wools by the Tariff Board shows that \$2 a hundred pounds is the average cost of transporting grease wool from the far West to the warehouses of Boston, New York or Philadelphia.

Already the freight rate on wool destined for Boston from Pacific coast points like Seattle, Portland, and San Francisco is, as stated by the Tariff Board, only \$1 per hundred pounds, as compared with rates ranging from \$1.72 to \$2.13 at interior points of shipment. The opening of the canal will reduce from 13,000 to 6,000 miles the distance by which wool has to be carried by water between Pacific coast ports and Atlantic coast

ports of the United States. It is the general expectation of informed shipping men that the Panama Canal will reduce at least one-half the present ocean freight rates between the Pacific and Atlantic seaboard. For some time there has been a rate of \$8 per ton on freight passing between the Atlantic and Pacific coast by way of coastwise steamers to and from the Isthmus of Panama and the Panama Railroad. This route, of course, involves the discharge of cargo at one end of the canal, a loading on to the canal train, and another handling from the freight cars into the second vessel's hold. Thus, not only is an enormous distance saved by the canal, but this double and costly handling of merchandise is dispensed with. The best steamship running-time between our Atlantic and Pacific seaboard via the Straits of Magellan at the present time is about sixty days. The running time for heavy freight steamers via the Panama Canal is estimated at about twenty days or less.

If the trans-continental railroads are to hold the carrying of any of the 36,000,000 pounds of wool annually produced in Washington, Oregon, Nevada, and California they must make rates a great deal lower than the present rates. And if the railroads reduce their rates from coast to coast they must make something like a proportionate reduction in the freight rates from interior points to Boston, New York, and Philadelphia. The net result should be a considerable saving to the Western men who grow the wool and the Eastern men who manufacture it.

All prophecy as to actual rates in advance of the opening of the canal must be more or less conjectural. Yet with steamships frequently sailing between our Atlantic and Pacific coasts and exempt from tolls, the general fact is clear that the average coastwise freight rate through the canal will be a very low one — perhaps so low that considerable quantities of wool will be brought by rail from the ranges of the Rocky Mountains and the Southwest to Pacific coast ports for shipment eastward.

At present the trans-continental railroad freight rates from Idaho, Montana, Wyoming, Utah, Colorado, and Nevada to Boston range from \$1.72½ to \$2.13 per hundred pounds. The rate from Arizona is \$2.07½, and from New Mexico from \$1.75 to \$1.95. But the ocean freight rates over the route of 6,000 miles from Buenos Aires direct to Boston have been only from 17½ to 25½ cents per hundred pounds. The freight rates from Australia over the 12,670 miles direct to Boston have been from \$1.37 to

\$1.70½ per hundred pounds, including the railroad freight from the shearing pens to the ship's side. The Panama Canal will shorten the route between Australia and Boston by about 2,000 miles, a substantial reduction, but by no means the great decrease which the canal achieves between our Atlantic and Pacific seaboards. It seems probable that the Panama Canal will deprive Australian wool growers of any advantage in freight rates which they may now possess over the Western wool growers of America, and that the aggregate saving to the wool growers of the West and the wool merchants and manufacturers of the East will be many hundreds of thousands of dollars every year.

THE NEW COTTON BILLS.

PROPOSALS OF CHAIRMAN UNDERWOOD AND REPRESENTATIVE HILL, FOR THE REVISION OF SCHEDULE 1.

It had not been anticipated that the cotton schedule would be considered at the present session of Congress. But the presentation of the Tariff Board report on cotton and the passage by the Senate of the Underwood House iron and steel bill, with amendments, apparently convinced the Democratic leaders of the House of Representatives that a revision of the cotton duties also should be attempted. On June 1 Chairman Underwood introduced a cotton revision bill identical with the measure of the year preceding. This was referred to the Committee on Ways and Means, which by a strict party vote ordered a favorable report upon it. The full text of the Underwood cotton bill is as follows:

A BILL

TO REDUCE THE DUTIES ON MANUFACTURES OF COTTON.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That on and after the first day of January, nineteen hundred and thirteen, the articles hereinafter enumerated, described, and provided for shall, when imported from any foreign country into the United States or into any of its possessions (except the Philippine Islands and the islands of Guam and Tutuila), be subject to the payment of duties at the rates thereafter provided; that is to say:

1. On cotton thread and carded yarn, combed yarn, warps or warp yarn, whether on beams or in bundles, skeins, or cops, or in

any other form, except spool thread of cotton, crochet, darning, and embroidery cottons, hereinafter provided for, on all numbers up to and including number fifty, ten per centum ad valorem; on all numbers above number fifty and up to and including number one hundred, fifteen per centum ad valorem; on all numbers above number one hundred, twenty per centum ad valorem. On cotton card laps, roping, sliver, or roving, ten per centum ad valorem. On cotton waste and flocks, manufactured or otherwise advanced in value, five per centum ad valorem.

2. On spool thread of cotton, crochet, darning, and embroidery cottons, on spools, reels, or balls, or in skeins, cones, or tubes, or in any other form, fifteen per centum ad valorem.

3. On cotton cloth, not bleached, dyed, colored, stained, painted, printed, or mercerized, containing yarn the highest number of which shall not exceed number fifty, fifteen per centum ad valorem; containing yarn the highest number of which shall exceed number fifty and shall not exceed number one hundred, twenty per centum ad valorem; containing yarn the highest number of which shall exceed number one hundred, twenty-five per centum ad valorem. On cotton cloth, when bleached, dyed, colored, stained, painted, printed, or mercerized, containing yarn the highest number of which shall not exceed number fifty, twenty per centum ad valorem; containing yarn the highest number of which shall exceed number fifty and shall not exceed number one hundred, twenty-five per centum ad valorem; containing yarn the highest number of which shall exceed number one hundred, thirty per centum ad valorem.

4. The term cotton cloth, or cloth, wherever used in the paragraphs of this Act, unless otherwise specially provided for, shall be held to include all woven fabrics of cotton, in the piece or cut in lengths, whether figured, fancy, or plain, and shall not include any article, finished or unfinished, made from cotton cloth. In the ascertainment of the value, upon which the duties imposed upon cotton cloth are made to depend, the entire fabric and all parts thereof shall be included.

5. On cloth composed of cotton or other vegetable fiber and silk, whether known as silk-striped sleeve linings, silk stripes, or otherwise, of which cotton or other vegetable fiber is the component material of chief value, and on tracing cloth, thirty per centum ad valorem; on cotton cloth filled or coated, all oilcloths (except silk oilcloths and oilcloths for floors), and cotton window holland, twenty-five per centum ad valorem; on waterproof cloth composed of cotton or other vegetable fiber, whether composed in part of India rubber or otherwise, twenty-five per centum ad valorem.

6. On all handkerchiefs or mufflers composed of cotton, whether in the piece or otherwise and whether finished or unfinished, thirty per centum ad valorem.

7. On clothing ready-made, and articles of wearing apparel of

every description, composed of cotton or other vegetable fiber, or of which cotton or other vegetable fiber is the component material of chief value, made up or manufactured, wholly or in part, by the tailor, seamstress, or manufacturer, and not otherwise specially provided for in this Act, thirty per centum ad valorem; on shirt collars and cuffs, of which cotton is the component material of chief value, twenty-five per centum ad valorem.

8. On plushes, velvets, velveteens, corduroys, and all pile fabrics, cut or uncut, whether or not the pile covers the entire surface; any of the foregoing composed of cotton or other vegetable fiber, except flax, and on manufactures or articles in any form, including such as are commonly known as bias dress facings or skirt bindings, made or cut from plushes, velvets, velveteens, corduroys, or other pile fabrics composed of cotton or other vegetable fiber, thirty per centum ad valorem.

9. On curtains, table covers, and all articles manufactured of cotton chenille, or of which cotton chenille is the component material of chief value, tapestries, and other Jacquard figured upholstery goods, composed wholly or in chief value of cotton or other vegetable fiber; on any of the foregoing, in the piece or otherwise, thirty-five per centum ad valorem.

10. On stockings, hose and half-hose, made on knitting machines or frames, composed of cotton or other vegetable fiber, and not otherwise specially provided for in this Act, twenty per centum ad valorem.

11. On stockings, hose and half-hose, selvaged, fashioned, narrowed, or shaped wholly or in part by knitting machines or frames, or knit by hand, including such as are commercially known as seamless stockings, hose and half-hose, and clocked stockings, hose and half-hose, on all of the above composed of cotton or other vegetable fiber, finished or unfinished, forty per centum ad valorem. On men's and boys' cotton gloves, knitted or woven, thirty-five per centum ad valorem.

12. On shirts and drawers, pants, vests, union suits, combination suits, tights, sweaters, corset covers, and all underwear of every description, made wholly or in part on knitting machines or frames, or knit by hand, finished or unfinished, not including stockings, hose, and half-hose, composed of cotton or other vegetable fiber, thirty per centum ad valorem.

13. On bandings, beltings, bindings, bone casings, cords, garters, ribbons, tire fabric or fabric suitable for use in pneumatic tires, suspenders and braces, tapes, tubing, and webs or webbing, any of the foregoing made of cotton or other vegetable fiber, or of which cotton or other vegetable fiber is the component material of chief value, whether composed in part of India rubber or otherwise, and not embroidered by hand or machinery, spindle banding, woven, braided, or twisted lamp, stove, or candle wicking made of cotton or other vegetable fiber, loom harness, healds,

or collets made of cotton or other vegetable fiber, or of which cotton or other vegetable fiber is the component material of chief value, boot, shoe, and corset lacings made of cotton or other vegetable fiber, and labels, for garments or other articles, composed of cotton or other vegetable fiber, twenty-five per centum ad valorem; on belting for machinery made of cotton or other vegetable fiber and India rubber, or of which cotton or other vegetable fiber is the component material of chief value, fifteen per centum ad valorem.

14. On cotton table damask, and manufactures of cotton table damask, or of which cotton table damask is the component material of chief value, not specially provided for in this Act, twenty-five per centum ad valorem.

15. On towels, doilies, bath mats, quilts, blankets, polishing cloths, mop cloths, wash rags, sheets, and batting, any of the foregoing made of cotton, or of which cotton is the component material of chief value, twenty-five per centum ad valorem.

16. On all articles made from cotton cloth, whether finished or unfinished, and all manufactures of cotton or of which cotton is the component material of chief value, not specially provided for in this Act, thirty per centum ad valorem.

SECT. 2. That on and after the day when this Act shall go into effect all goods, wares, and merchandise previously imported and hereinbefore enumerated, described, and provided for, for which no entry has been made, and all such goods, wares, and merchandise previously entered without payment of duty and under bond for warehousing, transportation, or any other purpose, for which no permit of delivery to the importer or his agent has been issued, shall be subjected to no other duty upon the entry or withdrawal thereof than the duty which would be imposed if such goods, wares, or merchandise were imported on or after that date.

SECT. 3. That all Acts and parts of Acts in conflict with the provisions of this Act be, and the same are hereby, repealed. This Act shall take effect and be in force on and after the first day of January, nineteen hundred and thirteen.

The Republican minority of the Committee on Ways and Means voted against the Underwood bill and attacked it in a minority report. Representative E. J. Hill, of Connecticut, one of the Republican members of the committee, prepared and introduced on his own initiative a revision bill which his Republican colleagues of the committee refused to approve as a party measure. Mr. Hill in describing his bill contended that it embodied greater reductions than those of the Democratic majority. The text of the Hill bill is as follows:

A REPUBLICAN PROTECTIVE SCHEDULE I BASED ON THE REPORT OF THE TARIFF BOARD RELATING TO PRODUCTS COMPOSED WHOLLY OR IN CHIEF VALUE OF COTTON.

A BILL (H. R. —) To amend an Act entitled "An Act to provide revenue, equalize duties, and encourage the industries of the United States, and for other purposes," approved August fifth, nineteen hundred and nine.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act entitled "An act to provide revenue, equalize duties, and encourage the industries of the United States, and for other purposes," approved August fifth, nineteen hundred and nine, be, and the same is hereby, amended by striking out all of the paragraphs of Schedule I of Section 1 of said act from three hundred and thirteen to three hundred and thirty-two inclusive of both, and inserting in place thereof the following:

1. Cotton card laps, sliver, roving, or roping, 5 per centum ad valorem.

NOTE. — Present law, ad valorem, 35 per cent; Underwood, 10 per cent. Not practicable to import in large quantities.

2. Cotton waste and flocks manufactured, or manufactures of, 10 per centum ad valorem.

NOTE. — Present law, 20 per cent; Underwood, 5 per cent.

3. Cotton yarns in the gray, or otherwise, not advanced beyond the condition of singles, by grouping or twisting two or more single yarns together, not exceeding number forty, $7\frac{1}{2}$ per centum ad valorem.

Exceeding number forty, and not exceeding number eighty, 10 per centum ad valorem.

Exceeding number eighty, 15 per centum ad valorem.

NOTE. — Present law, up to No. 15, 12.7 per cent; Nos. 16 to 30, 15.37 per cent; Nos. 31 to 40, 22.12 per cent; Nos. 41 to 80, 23.3 per cent; Nos. 100 to 120, 27.12 per cent; remainder, 15 per cent; total gray single for 1911, 16.39 per cent; colored, etc., total, 30 per cent. Underwood, up to No. 50, 10 per cent; Nos. 51 to 100, 15 per cent; above No. 100, 20 per cent.

4. Cotton yarn or thread not otherwise provided for, in the gray or otherwise, advanced beyond the condition of singles by grouping or twisting two or more single yarns together; and cable laid yarns or threads, in the gray, or otherwise, made by grouping or twisting two or more twisted yarns or threads together, shall be subject to the same rates of duty as the single yarns from which they are made, and in addition thereto 5 per centum ad valorem.

NOTE. — Present law, total cable laid, etc., 30.52 per cent; colored, 20.54 per cent; single, mercerized, 23 per cent; total, all yarn, 30.5 per cent. Underwood, yarns advanced same rate as singles.

Spool thread of cotton, crochet, darning, and embroidery cottons, on spools, shall be dutiable at the same rates of duty as the single yarns from which they are made.

NOTE. — Present law, thread average of all, 24 per cent; Underwood, 15 per cent.

Differences in yarn conversion costs between United States and England (page 423): Yarns No. 30 filling, 3.4 per cent; No. 40, 4.5 per cent; yarns No. 30 warp, 6.8 per cent; No. 40, 8 per cent; average, 5.7 per cent. Yarns No. 50 filling, 6.6 per cent; No. 60, 7.5 per cent; No. 70, 8.9 per cent; yarns No. 50 warp, 10 per cent; average, 8.5 per cent.

Ten per cent added to English cost to make selling price on which to figure duty. No yarns made for sale in this country above No. 140. Total imports of yarns to production, four-tenths of 1 per cent. Total imports of thread, $2\frac{1}{2}$ per cent of home production.

One company controls thread trade in Great Britain, United States, Canada, Russia, Austria, Germany, France, and Spain, and fills orders from local factories.

5. Cotton cloth, plain woven, in the gray, or bleached, dyed, colored, stained, painted, printed, mercerized, or otherwise finished, containing not more than five square yards to the pound, 5 per centum ad valorem.

Containing more than five and not more than seven and one-half square yards to the pound, 10 per centum ad valorem.

Containing more than seven and one-half square yards to the pound, 15 per centum ad valorem.

NOTE. — Present law, average of all cotton cloth containing only ordinary warp and filling threads either in the gray or bleached, or dyed, etc., 39.54 per cent. Underwood, made from No. 50 yarn or less, 15 per cent; Nos. 50 to 100, inclusive, 20 per cent; above No. 100, 25 per cent; if bleached, dyed, etc., No. 50 yarn or less, 20 per cent; Nos. 50 to 100, inclusive, 25 per cent; above No. 100, 30 per cent.

These cloths principally woven on automatic looms, see pages 490 to 495 of report. Cost of cloth from low-cost mills. Industry depressed in 1911. Trade-union rules as to looms run may be changed in either country. For finishing costs see page 502. The duties named herein should cover all contingencies. Wages have been advanced since Tariff Board figures were taken.

6. Cotton cloth, fancy woven, in the gray, or bleached, dyed, colored, stained, painted, printed, mercerized, or otherwise finished, containing figures produced by various weaving devices known as dobby, drop-box, leno, lappet, swivel, or any other name except Jacquard, 20 per centum ad valorem.

NOTE. — Present law, average of fancy cotton cloth containing other than ordinary warp and filling threads, gray, bleached, dyed, etc., 49.13 per cent; Underwood, by number of threads.

7. Cotton cloth woven by means of the Jacquard attachment, not otherwise provided for, 25 per centum ad valorem.

Cotton table damask, 25 per centum ad valorem; manufactures of cotton table damask, or of which cotton table damask is the

component material of chief value, not specially provided for in this section, 25 per centum ad valorem.

NOTE. — Present law, cotton damask, 40 per cent; Underwood, by number of threads.

8. Cloths containing silk or artificial silk, in which cotton is the component material of chief value, shall be subject to the same rates of duty as cotton cloths of similar weave, and in addition thereto 5 per centum ad valorem.

NOTE. — Present law 1911, 50 to 58 per cent; Underwood, 30 per cent.

Clause 8: If silk exceeds 10 per cent in quantity, it will be of chief value and go into silk schedule.

9. Cotton cloths filled or coated, in whole or in part, including oil-cloth of cotton, waterproof cloths composed of cotton or in which cotton is the component material of chief value, 20 per centum ad valorem.

NOTE. — Present law 1911, 42 to 50 per cent; Underwood, filled or coated, 25 per cent; waterproof, 25 per cent.

10. Handkerchiefs or mufflers of cotton, in the piece or otherwise, finished or unfinished, hemstitched or not, not otherwise specially provided for, shall pay the same rate of duty as the cloth of which they are made, and in addition thereto 5 per centum ad valorem.

NOTE. — Present law average, 55.11 per cent; Underwood, all, 30 per cent.

11. Plushes, velvets, and all pile fabrics made of cotton, or of which cotton is the component material of chief value, whether the pile covers the entire surface or not:

Uncut, 15 per centum ad valorem.

Cut, in whole or in part, 40 per centum ad valorem.

Provided, That manufactures or articles in any form, including such as are commonly known as bias dress facings or skirt bindings, made or cut from plushes, velvets, or other pile fabrics composed of cotton, or of which cotton is the component material of chief value, shall be subject to the same rates of duty as the fabrics from which they are made.

NOTE. — Present law average, 52.85 per cent; Underwood, all, 30 per cent.

12. All articles manufactured of cotton chenille, or of which cotton chenille is the component material of chief value; cotton reps, Jacquard figured tapestry and Jacquard figured upholstery goods, weighing over six ounces per square yard, made of cotton, or of which cotton is the component material of chief value, 40 per centum ad valorem.

NOTE. — Present law, 50 per cent; Underwood, no distinction in weight, 35 per cent.

13. Stockings, hose, and half hose, made wholly or in part on knitting machines or frames, commercially known as seamless, composed of cotton, or of which cotton is the component material of chief value, 20 per centum ad valorem.

NOTE. — Present law, 30 per cent; Underwood, 20 per cent.

14. Stockings, hose, or half hose, made wholly or in part on knitting machines or frames or knit by hand and commercially known as full-fashioned, composed of cotton, or of which cotton is the component material of chief material, valued at not more than two dollars per dozen pairs, 50 per centum ad valorem; valued at more than two dollars per dozen pairs, 60 per centum ad valorem.

NOTE. — Present law, 55 to 92 per cent; Underwood, 45 per cent.

15. All underwear of every description, made wholly or in part on knitting machines or frames, or knit by hand, finished or unfinished, not otherwise provided for, composed of cotton, or of which cotton is the component material of chief value, valued at not more than one dollar and fifty cents per dozen garments, 20 per centum ad valorem; valued at more than one dollar and fifty cents per dozen garments and not more than three dollars per dozen garments, 30 per centum ad valorem.

Valued at more than three dollars per dozen garments and not more than six dollars per dozen garments, 40 per centum ad valorem.

Valued at more than six dollars per dozen garments 45 per centum ad valorem.

NOTE. — Present law, 63 to 50 per cent; Underwood, 30 per cent.

16. Men's and boys' gloves, knitted or woven, composed of cotton, or of which cotton is the component material of chief value, 50 per centum ad valorem.

NOTE. — Present law, 86 to 50 per cent; Underwood, 35 per cent.

17. Tire fabric or fabric suitable for use in pneumatic tires, made of cotton, or of which cotton is the component material of chief value, 25 per centum ad valorem.

NOTE. — Present law, 45 per cent; Underwood, 25 per cent.

18. Bone casings, garters, suspenders and braces, webs, web-bings, and tubing, any of the foregoing composed wholly or in chief value of cotton, or of cotton and india rubber, and not embroidered by hand or machinery; spindle banding, woven, braided or twisted lamp, stove, or candle wicking, loom harness, healds or collets, boot, shoe, and corset lacings, labels for garments or other articles; composed of cotton, or of which cotton is the component material of chief value, 30 per centum ad valorem.

Belting for machinery made of cotton and india rubber, or of

which cotton is the component material of chief value, 20 per centum ad valorem.

19. Clothing, ready-made, and articles of wearing apparel of every description, wholly or partly manufactured, not specially provided for, composed wholly or in chief value of cotton, 30 per centum ad valorem.

NOTE. — Present law, 50 per cent; Underwood, 30 per cent; collars and cuffs, 25 per cent.

20. All articles made from cotton cloth, and all manufactures of cotton, or of which cotton is the component material of chief value, not specially provided for, 30 per centum ad valorem.

NOTE. — Present law, 45 per cent; Underwood, 30 per cent.

21. The term cotton cloth wherever used in the paragraphs of this schedule, unless otherwise specially provided, shall be held to include all woven fabrics composed wholly or in chief value of cotton, in the piece or cut in lengths, and shall not include any article finished, or unfinished, made from cotton cloth.

SECT. 2. That the last clause of paragraph three hundred and forty-seven of said act of August fifth, nineteen hundred and nine, is hereby amended so as to read as follows:

“Waterproof cloth composed of vegetable fiber other than cotton, whether composed in part of india rubber or otherwise, ten cents per square yard, and 20 per centum ad valorem.”

SECT. 3. That paragraph three hundred and forty-seven of said act of August fifth, nineteen hundred and nine, is hereby amended by adding the following proviso: *Provided*, That none of the foregoing shall apply to coated or filled cotton cloth, or articles made therefrom.

SECT. 4. That paragraph three hundred and forty-eight of said act of August fifth, nineteen hundred and nine, is hereby amended so as to read as follows: “Shirt collars and cuffs, composed of linen, or of which linen is the component material of chief value, forty cents per dozen pieces, and 20 per centum ad valorem.”

SECT. 5. That paragraph three hundred and forty-nine of said act of August fifth, nineteen hundred and nine, is hereby amended by striking out therefrom the words, “webs and web-bings.”

NOTE. — Total production of the industry for 1910, \$628,391,813; total production of cloth only, \$428,203,850; per cent of imports to total production, 1.79; per cent of exports to total production, 3.18; per cent of cloth imports to cloth production, 2.62; per cent of cloth exports to cloth production, 4.66.

THE TARIFF BOARD,
TREASURY BUILDING, WASHINGTON, May 25, 1912.
HON. EBENEZER J. HILL,
House of Representatives, Washington, D.C.

MY DEAR MR. HILL: Referring to your questions in conversation with Mr. Cowgill regarding the accuracy of the cost figures in our cotton report and your request that a statement be made in writing, I beg to say that in all instances where reports were obtained from cotton-manufacturing companies the results of our cost extensions were carefully examined by the officers of the mill before the report was forwarded to the Tariff Board. This examination was complete, and went into each detail of the extensions rather than merely to have the officers sign their names without making a close examination. The cost extension figures were carefully compared with the cost extension made by the mills, and all the reports forwarded to the board were agreed by the officers of the company and representatives of the board to be correct. As to the accuracy of these extensions, I wish to state that the total expenditures of the company were carefully checked to agree with the figures published in their annual financial statement. Using these sums as a basis, we then made up our own cost statement according to our own methods, which we believe to be accurate and not merely the accepting of the company's own estimates of cost.

In one instance a company was doing an \$8,000,000 annual business; after the costs had been extended for this company and the total number of yards of each kind of goods multiplied by the cost per yard as shown by the report, the figures checked within \$.33 of the total amount of money expended by this company in manufacture during the year for which the costs were taken. In another case, by the same method, the variation amounted to \$332. The greatest variation in any of the reports was in the case of a company doing a \$2,000,000 annual business, where, by multiplying the number of yards produced by the cost per yard ascertained by us, the difference amounted to \$3,500. But this difference would not affect the costs in the sixth decimal place.

In every case the companies agreed, after a careful examination, that our costs were correct, and in some few cases the mills have adopted our cost extensions in toto, while in others our system of extensions have been adopted at least in part.

These facts I believe fully justify the statement that the most accurate costs possible have been obtained.

Very truly yours,

HENRY C. EMERY, *Chairman.*

THE MINORITY REPORT.

On June 7 Representative Payne, of the Committee on Ways and Means, presented the views of the minority on the Underwood cotton bill, as follows :

This bill in so far as it relates to duties on manufactures of cotton is identical with the bill which was vetoed by the President a little less than a year ago. A brief reference to its history compels the belief that it is now reported by the majority without any expectation or desire that it shall be enacted into law.

In the Sixty-first Congress the Democratic membership of the Ways and Means Committee unanimously joined with the Republican members of that committee in reporting a bill to create a tariff board, whose duty it should be to make a thorough investigation and furnish the necessary information on which to base an orderly and scientific revision of tariff schedules. This bill was passed by the House by a large majority and concurred in by the Senate with an immaterial amendment. In the closing hours of the session it was defeated by a filibuster led by a Democratic Member. By a provision in the sundry civil appropriation bill, however, a tariff board was created and proceeded to the performance of its duties.

Notwithstanding this fact, at the extra session of this Congress the majority, without waiting for any report from the Tariff Board, proceeded to prepare and pass through the House a bill identical in terms with that now reported. That bill was made without any information additional to that which the committee had when the present tariff law was framed and enacted. No hearing was accorded to any parties whose interests were involved. The bill was rushed through the House pursuant to the dictate of a Democratic caucus without deliberation or opportunity for amendment. When it reached the Senate the Democrats of that body were not slow in finding out that its passage would result in the crippling of a southern industry. It was loaded down with amendments. One amendment tacked onto it was a revision of the metal schedule. Another amendment tacked onto it was a revision of the chemical schedule. This latter may not be inaptly termed as grotesque. It was not the result of any committee examination or report. It was offered from the floor of the Senate, and, as was subsequently discovered, represented the guesswork of a Treasury employee who had been instructed to turn specific duties into ad valorem, and then, regardless of the effect, to reduce these ad valorem duties uniformly all along the line. One effect of this amendment was to abolish the customs duties on alcohol imposed to compensate for the high internal-revenue tax and thus deprive the Government of a very large revenue. This, however, did not result in killing the bill.

On its return to the House the Democratic majority proceeded to concur in the amendments en bloc without question or deliberation, and so the bill went to the President. He had no alternative but to veto it. This he did, both because of the Senate amendments and because of the crude and haphazard character of the bill as it affected the cotton industry. The bill had not had the informing report of the Tariff Board, although that report was in process of preparation and promised within a short time thereafter. In his veto message the President said, *inter alia* :

"My objection to the cotton schedule is that it was adopted without any investigation or information of a satisfactory character as to the effect which it will have upon an industry of this country in which the capital invested amounted in 1909 to \$821,000,000, the value of the product to \$629,000,000, the number of wage earners to 379,000, making, with dependents, a total of at least 1,200,000 persons affected, and the wages paid annually amounted to \$146,000,000. The bill would not go into effect by its terms until January 1 next, and before that time a full report to be submitted to Congress by the Tariff Board, based upon the most thorough investigation, will show the comparative cost of all the elements of production in the manufacture of cotton in this and other countries. The investigation by the Committee on Ways and Means of the House did not cover the facts showing this comparative cost, for the reason that the committee was preparing a bill on a tariff-for-revenue basis and their view of a proper tariff was avowedly at variance with the theory of protection. Pledged to support a policy of moderate protection, I cannot approve a measure which violates its principle."

The protests that came up from the South, and had their influence on the Senate, showed conclusively the unwillingness of that section to have any tariff tinkering that would affect its industries. It was then publicly announced that revision of the cotton schedule had been laid aside.

On the 22d day of March, 1912, the Tariff Board made its report on the cotton schedule. Like its previous report on the wool schedule, the report was thorough and comprehensive, and furnished the necessary data on which to base an orderly and scientific revision of the duties relating to the manufactures of cotton. This report makes clear the crude, careless, and haphazard character of the bill which the president had vetoed and which is now again reported by the committee, without modification or change, except in the abandonment of the Senate amendments. The committee has paid no attention to the report of the Tariff Board, except to find fault with it because of the condemnation to be found in it of their bill.

The original discredited bill is now again reported, while there is pending in the Senate and not yet acted upon a bill relating to the tariff on wool, a bill relating to the sugar tariff, while a bill

relating to the metal schedule also remains undisposed of. It is hardly necessary to say that the profession by the party in power of a desire to revise the tariff and its actions are not consistent with each other.

Having these facts in mind, and the further fact that no reason can be assigned to justify the President in approving the same bill which he has heretofore disapproved, it is difficult to avoid the conclusion that the report of this bill at this late day of the session is to serve some other purpose than its enactment into law.

If the majority are willing to enter upon a genuine revision of the cotton schedule, availing themselves of the information furnished by the report of the Tariff Board, the minority will cheerfully coöperate with them in such revision.

SERENO E. PAYNE.

JOHN DALZELL.

S. W. MCCALL.

E. J. HILL.

J. C. NEEDHAM.

J. W. FORDNEY.

N. LONGWORTH.

THE WOOL MARKET IN THE WEST.

A FAIR DEMAND FOR THE NEW CLIP OF 1912 — LITTLE CONTRACTING AND AN IMPROVED RANGE OF PRICES.

DISTURBED conditions politically made especially interesting the wool market of the spring months of the present year. The situation in the West is thus clearly and concisely summarized in the "Textile Manufacturers Journal":

In view of the political uncertainty and the prevailing conditions in the wool and woolen goods trades, the marketing of the wool clip of 1912 and the prices paid for the same to the growers become matters of considerable moment to both dealers and consumers. Prices paid up to the present time have been materially higher than a year ago, though the grease cost is not an infallible guide to values, owing to the wide variation in the shrinkage and condition of the individual clips from year to year.

While contracting did not become general as early as in some recent years, considerable was done in southern Utah early in January, and by the middle of the month the movement had extended pretty well over the southern part of the State. From that time right up to shearing time contracts were freely made, as growers were willing to accept the offers of buyers from the East. At shearing time it was estimated that 4,000,000 to 5,000-

000 pounds of wool had been contracted, or over one-third of the total clip of the State, which in 1911 was estimated at 13,500,000 pounds.

This wool was secured at a grease price of 13 to 16 cents, perhaps a little more in some instances, the estimated scoured cost of the early contracts being 48 to 50 cents. This price was not materially raised after shearing, and consequently the southern Utah wools were secured at favorable prices compared with contracts and purchases made in other sections, or later in the season. At the present time dealers who have kept in close touch with the situation throughout the year estimate that fully 90 per cent of the fine wools of southern Utah are disposed of.

Very few of these wools have been consigned this year, as prices have been too high to necessitate such a course. Some good clips are still unsold, but late developments make it certain that the holders have made no mistake in waiting a while. It is the general testimony of those who have received these wools here, either by sample or in bulk, that the clip of southern Utah is of unusually light shrinkage this year. For this reason manufacturers are showing a great deal of interest in them as they come along and dealers find little difficulty in disposing of the current receipts in the original bags as fast as received.

The early shorn wools in Nevada were well covered by contract, the sales before shearing being estimated at a total of 3,000,000 to 4,000,000 pounds out of a total grown of 5,000,000 to 6,000,000 pounds in the whole State. At the present time the Nevada clip is practically all sold up, the general price paid in the grease, both before and after shearing, being 14 to 16 cents. The Nevada wools are turning out very irregular as to both condition and shrinkage, some buyers reporting them not up to the average, while others, with possibly a better selection of individual clips, say the clip of the State will average about as usual. One thing is certain, buyers are not finding their expectations exceeded in regard to the shrinkage, as was the case in southern Utah, and for the same reason manufacturers are not showing the same interest in the new Nevada wools.

In western Idaho the season is not so well along as in Utah and Nevada. This is largely due to the fact that growers were not willing to make as low prices relatively as were obtained in the States to the south. A few scattering clips were tied up by contract at around 16 cents, but the great bulk of the wool in that section of the State was left to be sold after shearing. Better prices have been paid lately than dealers were willing to offer earlier in the season, as high as 19½ cents being paid for some choice medium clips. At Mountain Home 250,000 pounds of wool were sold at a price which made the clean cost landed here 53 to 54 cents. In eastern Idaho 19 cents has been paid for choice clips, and that section is now well sold up. Throughout the Triangle and in the Soda Springs section considerable activity

was noted earlier, until dealers called a halt in the advance in prices. Growers were asking 18 cents for fine wools and 20 cents for medium clips. Buyers were paying 18 cents freely for choice clips and occasionally 19 cents was paid, but beyond this they were not ready to go. At Pocatello some wool was secured at $18\frac{1}{2}$ to 19 cents.

A great deal of wool has been bought this season in eastern Oregon, the buyer for a prominent Eastern mill being credited with buying fully 1,500,000 pounds in that State, and possibly in the neighborhood of 2,500,000 in Washington and Oregon together. In some sections of Oregon 20 per cent of the new clip was under contract before shearing, the average prices paid being about 1 cent per pound over last year.

Prices have taken a wide range in the State, some wools in the northern section going at 12 to 15 cents to the scourers and the better wools to the manufacturers at 18 cents. At Harrisburg some choice clips are reported to have been contracted at 20 cents, but this is an extreme price. At Echo one large clip has been sold at $15\frac{3}{4}$ cents, fully 500,000 pounds having been moved in that section. At Arlington a clip of 125,000 pounds was sold to the French combers at $17\frac{1}{2}$ cents. Portland reports sales of about 1,000,000 pounds on the basis of 10 to 14 cents for fine and 15 to $17\frac{1}{2}$ cents for medium.

The mill buyer above referred to is reported to have secured his early wool on the scoured basis of 50 cents per pound laid down in the East, but later purchases have cost much more than this. Recent sales have been made on the basis of 55 to 56 cents laid down, in some cases the cost being estimated at 55 to 58 cents. The latest figures show that Oregon is about 75 per cent sold, with Washington practically cleaned up.

The Wyoming growers have not sold so large a proportion of their wool as is the case farther West. This is partly due to relatively higher prices asked by them and partly to changed conditions in the East. If more than one-quarter of the clip, which last year was about 34,000,000 pounds in the whole State, has been sold, conservative dealers will be much surprised. The bulk of the selling thus far has been done in the southern counties around Rawlins and Rock Springs. The latter reports sales at 17 to $19\frac{1}{2}$ cents, 400,000 pounds having been recently sold at 19 cents. At Rawlins one large bunch of wool sold at 18 cents, while a clip of nearly one million pounds sold at 19 cents. These were for medium and staple clips. Finer wools sold at Rawlins at 15 to 17 cents. Considerable has also been done at Caspar, where the best clips have sold at 18 to 19 cents, the latter price being for clips running largely to staple. The Cosgriff clip brought 15 cents, or 53 to 54 cents clean, cost landed.

A little contracting has been done in Montana, but lately buying has been held up, as growers demand prices considered altogether too high by dealers and manufacturers. Some clips have

been secured at 17 to 18 cents, and the Murphy clip was recently sold at 19 cents. The latest transaction reported was the purchase of the Wood clip at $19\frac{1}{2}$ cents, and 20 cents is reported to have been paid for some choice medium clips. Growers are still demanding 19 cents for fine clothing wools and 21 cents for medium clips in most cases, but without buyers at these figures. Dealers here estimate that the purchases to date in Montana do not run over 2,000,000 pounds. Last year's clip was 33,000,000 to 34,000,000 pounds. Shearing has not yet commenced in that State and public sales are not likely to commence until about July 4.

The clip of Arizona is about 75 per cent marketed, considerable of the early shorn wool in that State having been shipped East and already sold to manufacturers. These wools sold in the country at 16 to $18\frac{1}{2}$ cents and brought 20 to $20\frac{1}{2}$ cents here, the scoured cost to the manufacturer being estimated at 55 to 58 cents. Very little has been done in New Mexico as yet, as shearing is late and dealers are showing very little interest in the new wools at the figures being talked by the growers. It is expected that these wools will be largely consigned.

The eight months' wools are being shorn in Texas, but sales have been few. One clip was reported sold early at $14\frac{1}{2}$ cents, and recently some choice clips have been secured by Eastern buyers at 15 to 16 cents; but buying cannot be said to be any more than begun. In California the buying thus far has been mostly by local buyers and little has been bought for shipment to the East. The clip of the State has attracted so little attention in recent years that dealers are disposed to fight shy of it. Around Amedee contracts were made by local buyers at $14\frac{1}{2}$ cents, and after shearing sales were made at 12 to 16 cents. At Lake View the offerings were cleaned up by two local buyers at $14\frac{1}{2}$ to $15\frac{1}{2}$ cents.

In the fleece wool sections the situation has been complicated by the operations of mill buyers who have been paying more than dealers could afford for medium clips. In Michigan 24 to $24\frac{1}{2}$ cents has been paid for medium wool on the cars. The higher prices have been paid by mill buyers, though local dealers are paying 23 to 24 cents for medium wools in that State. Relatively more has been done in Michigan than in Ohio, owing to the fact that more "bunch" lots are available.

Local dealers in Ohio are paying 24 to 25 cents, and as high as $25\frac{1}{2}$ cents has been paid in some cases for medium clips. It is difficult to get at the actual facts regarding the amount of wool already bought in these two States by Eastern buyers owing to the fact that they operate to a certain extent through local buyers. The season is very backward in the fleece wool States, as well as farther West, but this month will see greater activity in all sections where the bulk of the wool is still unsold.

The most serious feature of the situation is the fact that pur-

chases are being made at various points in the West at prices that mean a scoured cost laid down here fully as high as similar wools are now being sold for in this market. For instance, the early Dufour purchases in Oregon were reported to be made at an estimated clean cost of 50 cents laid down at the mill. Later on the clean cost was 55 to 56 cents landed, while recent purchases for dealers' account have been made on the clean basis of 55 to 58 cents. Medium clips are costing 58 to 62 cents landed in Montana and 55 to 58 cents in the Soda Springs district. Everywhere in the West there has recently been an enhancement of values, difficult to understand in the face of the disquieting reports from Washington regarding the probability of tariff changes in both wool and woollens and the uncertainty regarding the new lightweight season.

Since the writing of the above article active contracting has developed in Montana, and fully 20 per cent of the clip of that State is estimated to now be under contract. The large Ray, Long and Baer clips have been sold to Boston and Chicago firms at 19 to 20 cents, equivalent to 65 to 67 cents for fine staple landed clean in Boston. What is more, buying by other firms has been active in Montana, Wyoming, Idaho, and Oregon.

TECHNICAL EDUCATION AT KEIGHLEY.

INTERESTING REMINISCENCES BY SIR SWIRE SMITH OF THE
EARLY STRUGGLE FOR INDUSTRIAL TRAINING.

At a recent prize distribution to the successful students of the Trade and Grammar School, the Technical School, and the School of Art of Keighley, England, Sir Swire Smith in a notable address reviewed in a most interesting way the history of the fight for industrial training and improved education in Keighley and its neighborhood. "You all remember," Sir Swire said, "that the Keighley Mechanics' Institute was founded in 1825, 87 years ago, by four workingmen, and for some years was housed in the small upper room of a cottage, now a hay-loft. In those days there was hardly any education among the poor, and the Rector of the Parish, the Rev. Theodore Dury, was the constant friend and patron of the Institute.

"It is recorded of my grandfather, William Smith, founder of the firm of William Smith & Sons, worsted machine makers (now Prince Smith & Son), that he realized the extreme importance of education, although he had obtained but little for himself. He started a night school for his apprentices and sons in

his small joiners' shop, and engaged John Farish, one of the founders of the Institute, to teach it. There were no desks and no literary aids to learning, and the lads came to be taught after twelve hours of exhausting work in the machine shop. No wonder that as the summer approached the attendance fell off, and Farish suggested to my grandfather that the class should be closed. 'Does our Prince attend?' said my grandfather. 'Yes,' replied Farish. 'Then go on, it will pay me to make one good 'un.' That 'good 'un' was Prince Smith, the father of Sir Prince Smith, the largest and most eminent maker of worsted spinning machinery in the world. The little Institute — a beam of light in a desert of intellectual darkness — was supported by a handful of good men and true who erected and opened a building of their own in 1834, now the Yorkshire Penny Bank. Here the candle was kept burning (the cabinet of primitive scientific apparatus is still preserved); a library was formed; evening classes were held, and lectures were given. The late Sir Isaac Holden often told how he and the Townends of Cullingworth used to tramp over the moor three miles on winter nights to attend the lectures; and Charlotte Brontë and her sisters would walk the four miles from Haworth to change their books at the library. So in its modest way the Institute prospered and diffused light in many a dark place. In the sixties a drawing class was started, under the Science & Art Department at South Kensington, and a secretary was wanted. I had been a member of the Institute from my schoolboy days, and two members of the Committee, which consisted of the fathers and grandfathers of many of our leading employers of to-day, waited upon me and tried to persuade me to accept the position. That was in 1867, 45 years ago. I was approaching the responsibilities of life. I had my future before me, just as you young men have who are here assembled; but I confess that the welfare of my less fortunate neighbors had not given me serious concern, and so I told the deputation that I had no call for the work, and that they had better look elsewhere.

"A short time after, while on a visit to friends in Huddersfield, I attended with them the soiree of the Huddersfield Mechanics' Institute, which was then the most important in Yorkshire and probably in England. The Marquis of Ripon, then Earl de Grey, presided, and among the speakers were Sir Edward Baines, and

Dr. Samuel Smiles, the author of 'Self-Help.' Earl de Grey combatted the saying of Pope that 'a little learning is a dangerous thing,' and showed that a little learning, like a little money, could be made very helpful if wisely used. Dr. Smiles gave an address on 'Technical Education,' quite a new subject to me, in which he showed that the Germans and French, through their superior general education and by their application of the principles of science and art to manufactures and crafts, were making enormous progress in their industries. He greatly lamented the educational backwardness of England, and insisted that our only hope of retaining our industrial supremacy was by the giving to our own people as sound an education, and as complete an equipment in scientific and artistic training, as was obtainable in competing countries.

"I confess that my patriotism was aroused by what I heard; I felt that it was my duty, even in my small way, to do what I could to help on a national movement of such urgency, and on my return home I immediately accepted the Secretaryship that had been offered to me. I put my hand to the plow; and I did not look back till the Institute with its schools and classes was handed over to the municipality in 1904, nearly forty years after. And here let me say a word to my young friends before me. We never know the far-reaching influence of some of the simplest acts of our lives. If I had not attended that meeting in Huddersfield, in 1867, it is highly improbable that I should have been on this platform now."

At that time, in 1867, educational conditions in Keighley, England, Sir Swire said, were positively appalling. More than two-thirds of the children in the Keighley schools were factory half-timers, and through irregularity of attendance many children who had passed through the school course could not read or write. Not more than one-third of the adult population could write their names and a majority of the workmen could not read a newspaper. A great many well-meaning people of the better classes were of the opinion that the poor were all the better off without education, that "it unfitted them for the position in which it had pleased God to place them." When Sir Henry Roscoe became Professor of Chemistry at Owen's College in Manchester, in 1857, there were only 35 students in the whole college, of whom 15 were in his laboratory. The people of Manchester

took little stock in higher education and the college was so nearly in a state of collapse that the tenancy of a house in the neighborhood was actually refused to Professor Roscoe when the landlord learned that he was a professor of that institution. Artisans in Keighley and many of their employers also, beyond the manual skill which they had "learned by doing," were in a state of almost total ignorance of underlying principles.

The Mechanics' Institute drawing class, held in the cellar of the old Institute, was successful, and its mechanical drawings sent up to South Kensington were unsurpassed. The scheme of the Institute was planned with lofty aims for the elevation of the people. The building was opened in 1870, having cost nearly £20,000, equal to about £1 per head of the population. There was a large debt on the building, happily cleared in 1875. While the Institute was in course of erection, the Endowed Schools Act was passed, and the Commissioners who came to Keighley to reorganize the Grammar School were surprised to find the ground covered by the Institute scheme of a secondary and technical school for boys. They thereupon transformed the Grammar School into a secondary school for girls, which gained the distinction of being the first Girls' Grammar School established in the country under the Endowed Schools Act. The action of the Commissioners was more than justified, for the school, now attended by 235 pupils, has supplied a great want with conspicuous success.

Sir Swire Smith told how in the desire to obtain the best information for the preparation of the Institute — for there was no equipped school of that character in the country — he and his associates made a tour of France, Germany, and Switzerland in the spring of 1872. They found in each country a highly organized compulsory system of national education, and technical schools providing scientific and artistic equipment for their industrial armies. "Not Germany only," said Sir Swire, "but all the world had been supplied by England with weapons for the warfare of commerce, and had been taught by our people how to use them. Our late esteemed townsman, Mr. Richard Hattersley, used to tell with pride that he made the first worsted power loom that was erected in Germany. His agent conducted us over a factory where many of these Keighley looms were at work, and most of the yarn that was being woven in them was also from Keighley. It illustrates the very modern character of this

industry that we were entertained in Leipzig by a German yarn merchant, who, while representing a Bradford house many years before, had been the first to introduce Bradford yarns to German manufacturers. Yet in so short a time our customers, by the application of technical knowledge, had been able to produce from Keighley looms and Keighley yarns more attractive goods than were being woven in Keighley, thus outranging us with our own weapons through their greater skill in using them."

A School Board for Keighley was asked for, and there was a great fight over it. Sir Swire and his colleagues were ignominiously defeated. The election was conducted by voting papers, and it is significant to remember that those who were most ignorant evidently desired to remain so, for there were more opponents of a Board who signed their names with a cross, than the entire total who voted in its favor. There was great rejoicing among our opponents, and the town was placarded with this announcement: "Master Swire has gone to Germany to improve his education."

Two years afterward, however, a School Board was established. Meanwhile the Institute, with its day school and evening classes, was in full operation, and employers and employed gave it their support.

Sir Swire Smith spoke of his service on the Royal Commission on technical education, between 1881 and 1884, when the Commission had found that the remarkable progress in Germany and elsewhere was due largely to careful technical training. The report of the Commission aroused an improved public spirit, especially in Yorkshire and Lancashire, and the Keighley Institute stood out as a pioneer toward which much public attention was directed. As its work prospered its classrooms became more and more crowded with students, and the buildings had to be enlarged. In 1889 the Technical Instruction Act was placed on the statute book, and the whiskey money, amounting to over £750,000 a year — "the tax that the drinkers pay to the thinkers" — was donated to technical education, to be administered by the county and borough councils.

Of the part played by a distinguished American in this work Sir Swire Smith says:

During a visit to Mr. Andrew Carnegie at Skibo Castle, towards the end of the nineties, in a conversation on technical education

at the dinner table, I spoke of several of our Keighley students who had risen to positions of distinction and honor. Mr. Carnegie declared that my story was like a fairy tale, and he forthwith made me the offer of £10,000 for a library for Keighley — *the first library that he gave in England*. When he visited Keighley in 1900, to distribute the prizes at this Institute, and to accept the Freedom of the Borough, which by the way was *the first Freedom that was offered to him in England*, he stated that "he had followed the course of technical education for years, and remembered well that Professor Huxley, the highest authority, pronounced Keighley the ideal town in respect to its technical education." Referring to the library, he said, "Let me tell you one thing, that it was Keighley's unique honor that it was not asked for. You had put your hand to the plow and would have plowed that furrow to the end. What you have done for yourselves shows an unconquerable devotion to noble, useful work, and positively I could not refrain from saying to Sir Swire, 'I should like, if Keighley would let me, just to go into partnership with her, and let me feel that I am also doing something of that great work.'"

Mr. Carnegie not only gave to Keighley its library, but he signalized his visit by founding and endowing a Carnegie scholarship tenable at the University of Leeds, or at the Royal College at South Kensington. But that visit to Keighley was "twice blessed." It brought to a head a scheme for the foundation of technical schools at Pittsburgh, which he offered in a letter to the Mayor of Pittsburgh almost immediately after his return to America. The Pittsburgh schools are the largest, handsomest and best endowed technical schools in the world.

LOWER WOOL RATES FROM DETROIT.

RATES on wool by the carload from Detroit to Boston, New York, Philadelphia, and other Eastern points are ordered reduced under a decision by the Interstate Commerce Commission in the complaint of Thaugott, Schmidt & Sons, against the Michigan Central Railroad and other roads. Chairman Prouty is author of the decision, which requires the railroads to establish on July 15 next and maintain for two years wool rates from Detroit to Boston and other Eastern points which shall not exceed 78 per cent of the rates contemporaneously in effect from Chicago to the same Eastern points.

The complainant in this case alleges that the rates from Detroit were unreasonable in themselves, and unduly discriminatory as compared with Chicago and St. Louis' rates. The commission holds that the allegation of unreasonableness has not been sustained by testimony in the case, but that discrimination has been proved and should be stopped, as indicated. Judge Prouty says that Canadians do not require a 50-cent rate from Chicago eastward, nor do they require the application of a blanket uniform rate. The commission has established a system of wool rates in the far West based on distance, and can see no reason why that principle should not be extended east of the Mississippi River. On this basis the Detroit rate is to be reduced.

The present rate on wool in any quantity from Chicago and Detroit to Boston is 50 cents per 100 pounds. By the provision of the decision just made the rate from Detroit to Boston will be 39 cents per 100 pounds.

The commission's recent decision that the rates from points east of the Mississippi River to Boston should be based on distance instead of the present blanket system is in line with its recent decision on wool rates from points west of the Mississippi River to Boston and seaboard territory, when the commission sustained the position taken by the Boston Wool Trade Association.

HOW WOOL GROWING PAYS IN AUSTRALIA.

THERE is no doubt that English sheep farmers and their Australian cousins are very keen competitors. The way things are done under the Southern Cross is worth considering by all those at the growing end of the trade elsewhere, and should be followed with very great interest by sheep farmers throughout this country. New Zealand and River Plate crossbreds compete with English wool more than any other sort, the bulk of the raw material produced in Australia being of merino quality, that is, it is much finer than that grown in Great Britain.

We have been furnished with some very important particulars by the manager of one of the best-known stations in New South Wales, the clip grown there being very well known in the London market. It does indeed show to what perfection wool growing

has reached in Australia when up to 14d. is paid for good greasy wool. Home-grown fleeces can never be expected to compete with this class of staple, and we are satisfied that Australia will always be the home of the merino, and produce a large quantity of good useful wool. We commend the following particulars to the special consideration of English sheep farmers :

1911 CLIP SOLD LAST DECEMBER.

Total bales sold in London 791, comprising fleece, broken fleece, necks, pieces, bellies, and lambs.

Highest price for fleece.....	14½ per pound.
“ “ “ broken fleece.....	11½ “ “
“ “ “ necks.....	12½ “ “
“ “ “ pieces	9½ “ “
“ “ “ bellies	9 “ “
“ “ “ lambs	14 “ “
Average “ “ fleece wool.....	13½ “ “
“ “ “ 791 bales.....	12 “ “

309 bales sold in Melbourne (lower classes).

Fleece to 10¾d. Locks to 5¼d. per pound.

Total clip 1,100 bales. average price per pound, 10d.

Gross returns per head grown sheep (27,878), 10s. 1d. per head.

Average weight per head, 11 pounds, 10 ounces.

Description of sheep, 2, 3, and 4 year old ewes and ewe weaners.

It appears from the above that the gross return per head was 10s. 1d., a very creditable performance indeed. Of course, there is also the carcass value to reckon, and as these were good sheep they would be worth fully as much, if not more, than was obtained for the fleece. It has been reliably estimated that it costs about 6d. per greasy pound to grow wool on average stations in Australia, hence, given normal seasons, pastoralists in the Commonwealth are still finding their occupation a lucrative one. The one fly in the ointment is the recurrence of drought, and as we said last week, a very dry time is being experienced in many parts of Australia. — *Wool Record, Bradford, England.*

“PER THOUSAND PICKS.”

A MOVEMENT begun in Huddersfield has for its object the formulation of a standard weaving price-list, based not on the quarter-inch pick or the ten-foot “string,” but upon the thousand

picks. The idea is to draw up a scale for weaving done by women upon eighty-pick looms, taking one cut, one beam, and one shuttle as the starting point, and stating the additions to be made when the weaving is done by men and when more beams or shuttles than one are necessary. It may be possible in this manner to construct a scale that shall facilitate comparison with the rates paid in other countries and readily show what is due to the weaver. As manufacturers would still have to reckon in terms of picks per inch the list might be of less direct use to them than to other parties. As in the case of most new things, some time may be expected to elapse before the adoption of the proposed system becomes general, even should it survive the ordeal of the negotiations between the trade union and the associated employers.

The system of paying for woollen and worsted weaving at so much "per thousand picks" is general in Germany, although in Gera, Greiz, Glauchau, Meerane, and some other places the payment is reckoned "per 100,000 meters" of weft thread woven. In Austria payment per thousand picks is usual, but the rule is varied by time-wages in some districts. The thousand picks (with extras) is the universal basis in Belgium, and is adopted in Sweden. In France the system is extending in popularity, but weavers' wages in Roubaix are based on the picks per centimeter, to which are added in certain events extras, based on picks per "rang" (of $104\frac{1}{4}$ inches). In the United States a fixed price per yard is the common unit, varied with systems of paying so many one-thousandths of a dollar per pick per inch per yard.

It appears that payment "per thousand picks" has a considerable body of adherents, and as the number of picks woven is commonly shown by a mechanical counting device or taximeter "clock," operated by the picking motion, the sum due for wages is easily ascertained. Presumably the trade unionists who are pressing for the adoption of this method in Yorkshire are not anxious to see adopted at the same time other customs in vogue in some of the countries in which this is used. They might not like their employers, for example, to pay them a stated wage per working week and defer until the end of the year the payment of the balance shown by the dial! That practice is not entirely unknown in Continental countries. — *Textile Mercury, Manchester, England.*

THE EFFECT OF FREE WOOL IN THE NORTHWEST,
1893-96.*(From Quarterly Journal of Economics, May, 1912.)*

THE recent report of the Tariff Board on wool and woolens and the discussion on a revision of this schedule have turned attention again to the problem of the future of sheep growing in the United States. It is commonly admitted that there will always be a certain number of sheep raised as a by-product of farming. Farmers are recognizing that the benefits of keeping a few head of sheep, to consume the waste pasture and fertilize the soil, are greater than they had supposed. As the price of mutton rises, it will become more and more profitable to increase the number of sheep on the farms. There are also a few limited areas, of no value for agriculture, which may be devoted to sheep raising. Such is the case with certain arid tracts in Wyoming and Idaho. But the number of sheep which these areas will support is insignificant in comparison with the number now raised where sheep growing is carried on as an independent industry. The problem before the public is whether any changes in the tariff or other forces will so alter conditions that sheep raising will no longer continue as a separate business.

Some light has been thrown on this problem by the free wool episode of 1894 to 1897. During each of these years the number of sheep in the Northwest States increased. The conclusion has been drawn from this fact that the industry was in such a prosperous condition that it could thrive in spite of the tariff. Professor Chester W. Wright, in his "Wool-Growing and the Tariff," expresses this view when he says: "All of these States ended the period of combined industrial depression and free wool with more sheep than they had at the beginning — a fact which cannot but lead one to raise the question how necessary the protective tariff is for the wool-growers of this section."¹

It is my opinion, however, that the increase in the flocks during this period has been misinterpreted and that there are no grounds for believing that the industry was flourishing under free wool. In fact the opposite was true.

The free wool period was not only short, but expected to be short. From the very passage of the free wool act in 1894,

¹ "Wool-Growing and the Tariff," page 305.

sheep growers looked forward with hope of a Republican victory in 1896. The defeat of the Democrats in many States in 1894 strengthened their hope. It was confidently expected that, should the Republicans win the election of 1896, former conditions would be restored. Prices of sheep during the period were cut in half. Ewes which easily brought \$3.50 in 1892 could not be sold for \$2.00 in 1894. To sell at such prices meant ruin to most owners. If a man was not forced by his creditors to sell, there was but one thing to do — to let the flocks continue to grow normally and to hold over as many sheep as possible, in hope of a Republican victory in 1896. This is what was done, and this explains the continued growth in the number of sheep in the Northwest States, despite the depressed conditions. If the Republicans had not won in 1896 and if there had been no hope of renewed protection, there would have been a very sudden reduction in the number of sheep in the Western States.

To confirm this view, reference may be made to the statistics on the shipments of sheep out of one State. They show that the usual number were not shipped during the free wool years, and that there was a sudden increase thereafter. We have the figures of shipments out of Montana.²

1893.....	315,000	1896.....	600,000
1894.....	300,000	1897.....	727,592
1895.....	280,000	1898.....	583,320

In 1896 the shipments doubled, and they continued large during the following three years. The explanation of the large shipment in 1896 lies in the fact that prices quickly rose after the election; and on account of financial troubles it was necessary to realize on the stock as soon as possible. The small shipments in 1893-95 explain the increase in number of sheep on the range,—an increase which probably would not have continued had the period of free wool been prolonged.

Persons on the ground state emphatically that the conditions of 1893-95 were not those of prosperity. To quote the words of Senator Warren: "The fate of the ranch wool-grower during this period can be given in four words: 'they all went broke.'" On account of the low price of sheep, those who for any reason were forced to sell lost everything. It was only by holding over

² Montana Bureau of Agriculture, Labor, Industry and Publicity. Reports, 1894 to 1899.

until protection was renewed that the average sheepman was able to maintain himself. His capital and credit had been strained to the utmost in trying to hold his flocks over, so that by the end of the period his borrowing power at the bank had been used to the limit. A failure to regain protection would have brought bankruptcy. Some interesting stories are told of the bets which men made a few days before the election of 1896, by taking an option on flocks of sheep at a price midway between the free wool price of sheep and the normal price.

Such were the results of free wool during a period when grazing land was much less valuable than it is at present. But with the coming of the dry land farmer, the range has continually been more confined. It is generally admitted that sheep cannot be profitably raised in large flocks on land worth more than \$5 per acre. For the past four or five years the process of "cleaning up" has been going on in Montana. Men have been selling out their large flocks as fast as possible. It is probable that the outlook for a lower tariff has had little to do with this process. The sheepman is rapidly giving way to the dry land farmer, who will make it possible to dispose with profit of a large part of the range in a much more certain fashion than any act of Congress ever can. For the West, this change to a more intensive utilization of the land is one of the signs of thickening population and economic progress.

ROBERT C. LINE.

HARVARD UNIVERSITY.

LUSTER IN FABRICS.

CAUSES AND CHARACTER OF THAT SILKINESS OF FIBER SO IMPORTANT TO THE TEXTILE INDUSTRY.

DISCUSSING the subject of luster in fabrics the "Yorkshire Observer" in a recent issue says:

Silk is preëminently the most lustrous of materials, and others are termed silky the nearer they approach this fiber in its properties; but the reason why luster is exhibited is by no means easy of explanation. The celebrated colorist Chevreul dealt with this matter many years ago under the title of "The Optical Effects which Silk Fabrics Manifest," and his theory, which is generally accepted, applies equally to all fibers, threads, yarns, or fabrics. Briefly, luster depends upon the reflection of light

from the fiber surfaces in two ways. It is most brilliant when a satin weave is used in which the fibers are arranged parallel and in close contact. In scientific terms this luster is due to the reflection of light from a set of slender and parallel cylinders, having specular surfaces and lying side by side in close contiguity. The second optical phenomena embrace what are known as rep effects, where the light is reflected from a similar set of fine parallel cylinders transversely grooved, but this second effect is much less brilliant than the luster from a satin weave. The sheen caused by the latter is produced by a reflection of bright light from a linear zone lying longitudinally along the prominent portion of the surface of each one of a group of contiguous fibers, and the luster is thus due to thin sheets of bright light reflected in planes alternately with sheets of lesser light from more shaded portions.

In the case of rep weaves the curved surfaces which appear brilliant are interspersed by shaded or obscure surfaces in two directions transverse to each other, so that the luster is due to reflection of bright light from prominent portions of a linear series of exposed convex surfaces, each formed by a cylindrical fiber bent into the arc of a ring. The luster in this case consists of fine beams of bright light, separated by a grating of lesser light reflected from the shaded portions. Or, to sum it up concisely — rep luster is a modification of the luster of a satin weave caused by the transverse division of each thin sheet of bright light into a series of fine beams. The most lustrous thread is one which shows a group of substantially parallel fibers, and is seen in the ideal form in the case of long silk filaments reeled directly from the cocoon, such filaments having only just sufficient twist about each other to hold them together. With spun silk, which is produced by combing and spinning relatively short fibers, the resulting thread shows a luster which departs from that of satin and approximates that of rep in proportion to its amount of twist.

As luster is diminished by twisting fibers together, there have been many attempts to get over this difficulty by making the yarns untwisted. But difficulties are met with here, principally in the lack of strength such yarns have and their general unworkable qualities. To impart sufficient strength to allow of weaving and the subsequent treatment, the fibers of untwisted yarn have either been enclosed in a helical envelope of destructible material or embedded in an adhesive material serving as size, this latter being dissolved out after weaving, leaving the fiber again in a free state. Such yarns have been used to impart a peculiar flossy or silky appearance to the surface of fabrics, and a patent has been taken out which is stated to be worked on the following lines:

The fibers intended to form an untwisted thread are united parallel to each other by means of a comb, the number of threads

to be united depending upon the thickness of the yarn. They are then caused to pass into a bath of some agglutinant which causes them to adhere together without twisting, after which they are wound on a series of drums with plain surfaces, one after another, but so that none of the consecutive coils of yarn will touch each other. To accelerate the drying, a current of warm air is caused to pass along the sides of the drums, and before the desiccation is complete the yarn passes through a draw plate of perforated rubber, so as to round off and compress the thread. As so produced the yarn is hard and stiff, and to render it more pliable it is passed through glycerine or paraffin and is again dried.

WOOL AND ITS ANALOGUES.

The softening material may be added to the size with the object of simplifying the process, or the sized yarn may pass through the softening material immediately before the partial or complete drying in order to require only one machine. After these operations the yarn is round and flexible, and may be used in conjunction with twisted yarn on an ordinary loom, and also in the delicate machinery employed in the manufacture of tulle, lace, or embroidery. It is claimed that the fibers of a thread prepared in this manner are not liable to separate or be caught by rough surfaces, but the sizing must be effected with materials which are easily eliminated, such as dextrin, flour paste, or gelatine. After the manufacturing processes have been gone through, the fabric is well washed in either hot or cold water for the purpose of completely removing the gelatine or size, and is then thoroughly rinsed and dried.

The intrinsic properties of lustrous fibers are approximation to cylindrical form, relative fineness in size, and specular smoothness of surface, while the requisite extrinsic conditions are parallelism of position and contiguity. In other words, the nearer cylindrical the fibers are, coupled with fineness, gloss, parallelism, and closeness, the greater will be the degree of luster shown. Spun silk has much less luster than floss silk as it comes from the cocoon, owing to the disturbance of the fibers by the spinning twist required to make a thread; and this inferiority is still further increased by the ends of the relatively short fibers which project from the sides, causing more or less down or fuzz which interferes with the reflection of light.

The luster in cloths made from wool is due to the same principle of obtaining a parallelism of fibers, that of worsteds depending upon the careful combing which the wool undergoes prior to spinning, while the surface fibers of faced woolens are combed into this state by the raising machine, and are thus fixed by boiling. Properly speaking, neither the combing of the wool nor the raising imparts luster; what they do is simply to produce fibrous conditions which are favorable to the display of whatever luster

the wool possesses. Silk, natural or artificial, is the smoothest and most perfect cylindrical fiber known, and is best described as an almost transparent rod of natural gum, exceptions being, of course, the wild Tussah silks, which are dark colored and rough. Alpaca and Mohair then follow in point of brightness, and after these the long combing wools that go to form the well-known luster yarns. Certain growths of cotton have a great amount of natural luster, notably that known as Sea Island cotton, and in a lesser degree some of the Egyptian kinds, while much of that grown in the lowlands of the United States is also entitled to come under the designation of "silky."

ARTIFICIAL AIDS TO LUSTER.

Mechanical and chemical devices have long been used for the purpose of bestowing a silky appearance on cotton, etc., the two of most importance being the well-known operations of mercerizing and schreinerling. Attempts have also been made to cover the surfaces of cotton fibers with coatings or varnishes of dissolved wool and silk fiber, with the idea of forming a glossy covering capable of reflecting light, but no practical result by this method of treatment has been attained yet. Before the increased manufacture of artificial silk, cotton lustered by mercerizing was the chief competitor with natural silk, but now the process has fallen into abeyance as the artificial silk rivals even the genuine article in point of brilliance. With some makes of imitation silk the luster has a peculiar metallic appearance very different to that from the silk moth, but many of the makes are now so like the genuine fiber as to deceive even experts. The silky luster in natural cotton fibers is somewhat remarkable, as the fibers are by no means cylindrical, but consist of a narrow ribbon with thickened edges and full of twists similar to an auger blade. But the general contour of an auger blade is cylindrical, or the blade may be considered as a cylinder deeply scored with a spiral groove, so that the aggregate of light reflections from its edges would in a minute object give the same optical effect as a solid cylinder. As silky cotton has fibers which are relatively fine with more or less specular surfaces, it is probable that the reflections from the edges of the small spirals are not different in kind from those continuous cylindrical surfaces.

Natural cotton undergoes a decided physical change under the action of caustic alkalies during the mercerizing process. The fibers swell up and take on a cylindrical form with a smooth glossy surface, and if not permitted to shrink during this operation the luster is fairly permanent. The process of schreinerling is applied only to fabrics, and consists of embossing the surface of the cloth with a number of very fine parallel lines or grooves forming plane surfaces from which the light is reflected in sheets whenever a certain angle of incidence is reached, the contrasting

dark surfaces not being at the correct angle to reflect the light. The lines are, of course, so minute as not to be visible to the naked eye, and the luster exhibited is of the same nature as that reflected from the inside of an oyster shell, with the sole difference that it is not iridescent. If it were possible to emboss on a fabric lines sufficiently minute, the light reflected would be split up into the colors of the spectrum and a rainbow effect would be secured, but this appears to be a mechanical feat outside the range of possibility as things are yet.

Some time ago a patent was registered for a novel method of producing silky luster upon textiles, the process, taken broadly, being as follows: A thin layer of adhesive substance having the property of setting into a hard but flexible film was spread evenly on the surface of the material under treatment. Over this was sprinkled a number of infinitesimally small glass spheres which were gently pressed in until embedded to a third of their depth, after which the layer was allowed to harden. Light reflected from a dense mass of tiny globes gave a bright silky luster when viewed at certain angles, and the patent provided for the obtaining of color effects by coloring the medium in which the spheres were embedded.

COMMERCIAL PROGRESS OF IRELAND.

MR. HUNTER SHARP, United States Consul at Belfast, Ireland, in a recent number of the "Daily Consular Reports" makes an interesting statement, which is here reproduced, of the effect of the act of Parliament of 1885 and succeeding acts on the conditions of life among the agricultural population of Ireland.

Immense sums of money have been advanced by the government to enable the farmers to become owners of their farms. Cottages have been built and let with a small piece of land for a nominal weekly sum, for the purpose of retaining the population in the country districts. Boards have been formed to assist in the removal of families from poor to more fertile districts, and every effort has been made, with apparently good results, to improve the condition of the poorer classes of the population.

Consul Sharp also presents a very interesting statement relating to the textile industries of Ireland, particularly that of flax raising and linen manufacturing, from which it appears that four-fifths of the world's manufacture of linen goods is to be credited to the Province of Ulster, which has 90 per cent of the spindles and 95 per cent of the looms in Ireland.

The Irish woolen industry is of some importance, though her

imports exceed her exports. The wool industry also is considerable, the clip last year amounting to 23,877,000 pounds, 75 per cent of which was exported.

Consul Sharp's report follows :

Agricultural and rural life in Ireland has been much improved by the system of land purchase introduced under the act of Parliament in 1885 and by supplemental acts enabling tenants to borrow money on government credit for the purchase of farms. The installment payments of these loans are spread over fifty or sixty years, on such terms that the annual amount required to cover both interest and sinking fund is less than the rent formerly paid.

Under these acts the government has already advanced more than \$486,650,000, and in the course of another thirty years a large part of the Irish farmers should own their farms free from any charge. To restrain the exodus from the country districts into the large towns, laborers' cottages have been built in the country districts. These, with about half an acre of land each, are let to laborers at 24 to 36 cents a week, the difference between the rent charged and the annual cost being borne by the taxpayers.

A congested-districts board has been formed, among its objects being the removal of families from lands too poor and barren to support the number settled on them to more fertile localities, the securing of suitable land for this purpose, the promotion of cottage industries, and the development of the fisheries along the Irish coast.

The Department of Agriculture in Ireland, which has been established about ten years, has done much useful work in disseminating information and establishing model schools for the instruction of farmers and for training women in dairy work. The Irish Agricultural Organization Society has for its object the teaching of the farmer that whatever legislation may do for him his own energy and industry remain the chief factors in the achievement of rural happiness and prosperity, and instructing him in the accomplishment of this end through the organization of societies for the purchase of his requirements and the marketing of his produce. No less than 100,000 farmers are now so organized in some 907 societies, including creameries, credit banks, agricultural societies, etc., having a turnover of about \$13,528,870 in 1911. Better farming methods are introduced, and the social relations developed do much to counteract the isolation and monotony of farm life.

CROP RETURNS — LIVE STOCK.

Three-fourths of the population of Ireland is engaged in agriculture, mainly in the south and west of the country, and a

distinct improvement in the rotation of crops is shown from year to year. The exceptional drought which prevailed during the growing season in 1911 no doubt caused many crops to be harvested in much smaller quantities than would otherwise be the case, but with good prices realized, the results should be satisfactory. The flax crop suffered for lack of moisture, but while the amount of straw pulled was disappointing the prices for the finished article were fairly up to the average.

The abundant yield of potatoes in Northern Ireland in 1910 gave the farmers a fine opportunity to dispose of a large surplus to France and Southern England at good prices during the following winter and spring. In 1911 they were again favored with a large crop, giving prospects of large exports to England, the Continent, and the United States. The latter country has already taken a large quantity.

The following table shows the acreage devoted to various crops in Ireland in 1910 and 1911:

CROPS.	1910.	1911.	CROPS.	1910.	1911.
Wheat . . .	47,631	45,056	Vetches	2,303	2,317
Oats	1,073,690	1,040,185	Rape	2,856	2,941
Barley . . .	168,008	158,180	Other green crops . . .	30,333	29,127
Rye	8,681	9,026	Flax	45,974	66,613
Beans	1,839	1,683	Fruit	12,994	14,045
Peas	230	301	Hay:		
Potatoes . .	592,985	591,259	First year's	517,182	542,401
Turnips . . .	275,296	270,795	Second year's	363,659	396,822
Beets	75,267	77,857	Permanent meadow . .	1,540,746	1,573,180
Carrots . . .	1,487	1,444			
Parsnips . .	703	696	Total	4,792,721	4,861,214
Cabbage . . .	30,857	37,281			

The number of the principal live stock in the island excepting sheep shows an increase in 1911 compared with 1910. The following table shows the number of each for the two years:

LIVE STOCK.	1910.	1911.	LIVE STOCK.	1910.	1911.
Asses	240,677	246,353	Mules and jennets . . .	31,460	31,740
Cattle	4,688,888	4,711,720	Pigs	1,200,005	1,415,119
Goats	242,614	258,474	Poultry	4,339,015	5,447,801
Horses	613,244	616,331	Sheep	3,979,516	3,907,436

TEXTILE INDUSTRY — SMALL RAW MATERIAL SUPPLY.

More than 90 per cent of the spindles and 95 per cent of the looms in Ireland are in factories in the Province of Ulster, where approximately four-fifths of the world's linen is produced. The latest statistics available are those for 1910, which give the

number of yarn spindles as 945,962, thread spindles, 19,120, and power looms, 36,892. In 1907, the latest year for which labor statistics can be obtained, 70,382 persons were employed in the flax, hemp, and jute textile factories, 4,103 in the wool and worsted works, 554 in hosiery factories, 403 in cotton mills, and 250 in silk mills.

Although the linen trade had a fair year during 1911 it did not enjoy the same amount of prosperity as some of the other industries. The extra cost of linen and the fall of six cents a pound in the price of cotton during the year restricted business and made flax spinning and manufacturing unremunerative. For four months, beginning October 1, 1911, the spinners worked short time. Earlier in the year the Power-Loom Manufacturers' Association took measures to reduce production in their branch of the trade by 10 per cent.

Owing to the almost complete absence of rain in the flax-growing season, weft and fine warp spinners have found it exceedingly difficult to obtain a sufficient quantity of flax of the requisite fineness in any market. Reports from exporters indicate that the spinners will be obliged to take a larger proportion of the more common varieties of flax during 1912.

The imports of flax into the United Kingdom were the smallest since 1904, totaling 62,403 tons (ton = 2,240 pounds). The imports of tow were 17,718 tons. The imports of flax from Russia dropped 3,562 tons, from the Netherlands 239 tons, and from Belgium 3,322 tons from the 1910 figures.

The yarn market was dull at the opening of the year, with steady prices and a small amount of business. Tows were scarce and tended toward higher prices in the April quarter. At the end of the first six months the market was very quiet, with prices lower. In the third quarter prices were unsteady and purchases small, and this condition prevailed to the end of the year. Continental yarns were cheaper. The position of the market was generally sound and healthy, as no big stocks of yarn or cloth were believed to exist. With the exception of 1910, the exports of linen yarns from the United Kingdom during 1911, amounting to 18,003,000 pounds, valued at \$5,932,234, were the largest in quantity since 1899. In value they have only been exceeded once, in 1907, since 1877. The imports of linen yarns into the United Kingdom in 1911 totaled 28,976,012 pounds, against 28,801,612 pounds in 1910.

LINEN PIECE-GOODS MARKET.

The manufacturers of brown power-loom linens experienced a disappointing year. Starting with the average number of orders and prices, the trade gradually slackened and then improved toward autumn. While the decline in yarn prices helped manufacturers who bought short, practically all the advantage had to

be given to merchants. The prices in the spring were the most unremunerative since 1908.

There was no great change in the character of the goods made during the year. Colored goods were produced in limited quantities, as the merchants were very cautious in placing orders. Damask looms were kept fairly busy throughout the year, and this branch of the trade was exempted from the short-time agreements on account of its advance orders. The home trade offset somewhat the sluggishness of the American demand for these goods. There was a steady trade in canvas goods, with prices favoring the buyer. Hucks were in good demand, both at home and abroad, in plain and figured varieties. The makers of shirting linens and cambrics found business unsatisfactory. Brown dress goods were made in fair quantities, but not equal to the 1910 output. Checks, dowlas, ducks, and stripes were placed in moderate quantities during the season. Bleached goods kept well up to the average and did a satisfactory business, although the output was somewhat lessened.

The prospects for 1912 are much better than 1911. The lower prices of yarns offer a safer basis for merchants to operate on, and the outlook in both home and foreign markets is good.

The exports of linen piece goods from the United Kingdom during 1911 amounted to 194,014,800 yards, valued at \$27,474,755, and the linen manufactures, including sewing thread and other articles, reached a grand total of \$38,177,828, a decrease of \$2,120,168 from the 1910 figures. The best customers for linen piece goods were the United States, which took 107,207,200 yards, valued at \$13,695,698; Australia, 13,321,600 yards, valued at \$2,262,689; and Canada, 12,451,900 yards, valued at \$1,364,182. In each case these returns are below the 1910 figures. The only countries showing increased purchases were the British East and West Indies, Colombia, Panama, and New Zealand.

A textile testing-house was opened at Belfast during 1911, which is proving of increasing value to the trade. All tests are made with the greatest care and absolute secrecy. The testing house is prepared to deal with any samples in connection with the textile trade, and its certificates are accepted as evidence in courts of law.

An Irish trade-mark has been adopted and registered in several foreign countries by the Irish Industrial Development Association as a means of promoting the sale of Irish-made goods. It can be used only under a certificate issued by the association, which is granted only to producers of good repute and financial standing, for use on goods of Irish manufacture only. In May, 1911, the right to use this trade-mark had been granted to 495 firms. In addition to protecting its trade-mark, the association endeavors to prevent, by prosecution when necessary, the sale of foreign goods as of Irish manufacture.

WOOLEN TRADE — MARKET FOR AMERICAN GOODS.

It is estimated that over three-fourths of the Irish wool clip is exported, and in spite of the increased output of the Irish woolen mills the imports of woolen goods still exceed the exports. The Irish mills had a prosperous year and their products were in good demand. Irish dealers are giving a marked preference to all home-manufactured goods, which is likely to increase as long as only pure wool is used and the quality and patterns are kept up.

THE LEICESTER SHEEP.

AN appreciative article on the Leicester sheep in the "Wool Record" (Bradford, England) speaks thus of the fine qualities of an animal that has played a notable part in the development of choice flocks in many parts of the world:

Of all the British breeds of sheep, the Leicester and South Down types are the purest, the latter enjoying the further distinction of being the oldest. Both breeds have been known to many sheep farmers from their boyhood, and no show of any standing would be complete if it did not provide a class for these types.

The Leicester sheep has many points in common with other English long wooled sorts. It differs from the merino in shape, having a large well-developed body, standing well up from the ground, and immediately suggests the idea of a weighty carcass as well as a big fleece. The merino, when compared with it, appears to be built on somewhat short, stumpy legs. The present-day Leicester is the outcome of centuries of in-breeding, and it has been declared that the progeny of any other sheep crossed with it will show more points natural to the Leicester than to its other parent. It bears a good fleece of round fibered, glossy, silky wool, weighing on an average eight or nine pounds. The length of the staple, which varies from seven to eight inches, permits of its use for combing purposes, and the fabrics into which it is made take delicate dyes splendidly, on account of the natural luster. The sheep belongs to the hornless class, and has a rather small and somewhat sharp-featured face, the neck tapering towards it from the body, which is barrel-like, with broad, well-fleshed shoulders, full chest, straight underline, and strong, soft, pink skin. The description could be quite easily prolonged to half a page, but no more than the distinguishing features need be mentioned, and the above will serve as a short enumeration of the animal's points.

Though it has been bred without the introduction of any outside blood, so good are its qualities that it has been used to

improve several other English breeds, and also crossed with the merino. The Leicester has been more often brought into conjunction with the last-mentioned sheep than with any other, and the wool so bred has scores of admirers among buyers and breeders, who constantly affirm that the Leicester-merino wool is the best of all crossbreds. The sheep bearing this wool are fairly hardy, and like all other breeds are most profitable when kept on clean, well-watered runs. Their fleeces are in great demand among combbers, as is that from the parent Leicester, being long, lustrous, and of good quality and character. As regards the fusion of the Leicester with other British types, we will cite two instances. The Lincoln would never have held its present high status had it not been for the Leicester, which was called in to take away from it its long, narrow rig, lengthy and heavy legs, flat sides, and the exceptionally long time required for it to come to full maturity.

Another famous cross has been effected with the Cheviot, to produce a type which is now noted everywhere — the Border Leicester. Here we see a grand body, due to the Leicester, and the soft white wool of the Cheviot, made brighter and firmer by the same means. At the present time, breeders of this type of sheep in the county from which it derives its name are not in the public eye. It appears to be most widely bred in England in the Central Plain of Yorkshire, the East Riding of the same county, and in Durham and Cumberland. The breeders of these districts, especially those resident in Yorkshire, have been fortunate during the last decade in carrying off most of the prizes offered for this class of sheep at the majority of the large shows, such as Smithfield, Driffild, Halifax, and Newcastle. Its great home is not, however, in the land which gave birth to it, but the South Island of New Zealand, which would be practically at a deadlock without it. Of recent years it has become one of the most popular sheep in the island, and bids fair to maintain the premier position for many years to come.

NEW ENGLAND [AUSTRALIAN] WOOLS.

THE name of New England seems to be a favorite one in wool circles, and to those of our readers who are not well acquainted with the best growing districts in Australia, we should like briefly to mention the leading characteristics of the raw material grown in that part of New South Wales. The writer has often said that, if he were to emigrate to Australia, that would be the district he would choose to settle in, because nature seems to have specially favored that part of the premier State. We have long been familiar with the district, and can speak of its excellent climate and pasture. The incoming mail brings particulars of

the sale of many New England clips in Sydney, and undoubtedly they have made very creditable prices. Right from Tamworth to Tenterfield is a splendid area for the merino, and the class of wool the sheep grow ranks as one of the best in New South Wales. The country is somewhat hilly, and on that account provides a different "bite of grass" from what we find upon the hot rolling plains of the Riverina or the red sandy soil of the "Far West." The wool itself presents a far different appearance from that grown upon the districts named, and being produced upon black soil, it possesses all the leading characteristics which wool invariably does when it is grown upon such country.

There are several well-known stations in New England. Some very good clips indeed come from that section of the State, and are catalogued for sale in the London market. Already we have had some noteworthy brands brought forward this season, and the next series of sales should see submitted some further good clips, though no doubt they will be of somewhat small dimensions. Still, the wool is exceedingly good, and one cannot but observe that with the splitting up of the stations, the number of small clips is yearly increasing.

The leading characteristics of New England wools may be said to be fineness of quality, a good length of staple, softness of handle, and good milling properties. We have long maintained that next to the Mudgee district of New South Wales, New England provides some really excellent fine clips. Either squatters have not been breeding altogether for weight of fleece or the country does not favor the production of the broad-haired, deep-stapled wools, for New England products are seldom below 70s quality. An excellent color can always be relied upon, together with a soft, silky handle. Probably it is the latter characteristic which is so much prized, and which calls forth the competition of those who want a specialty. As a rule, the wools are very firm in staple, and for those wanting a sound, well put together fabric, combined with weight and handle, we know of no wools better suited for the purpose. Being so fine in the fiber, they finish splendidly, and do exceedingly well for the production of those goods where a fine-faced finish is wanted. We know firms who buy New England wools for making good billiard cloths, and they are also very suitable for army and police cloths where strength and hard wear are wanted. We would specially urge upon small farmers the wisdom of removing the skirt, britch, and bellies from the fleeces, and having the latter sold by themselves.

Growers can always rely upon excellent competition for New England grown wools. — *Wool Record, Bradford, England.*

NOTES ON THE AUSTRALIAN WOOL YEAR.

A CENTURY OF SALES NOW COMPLETED, ACCORDING TO THE GOLDSBROUGH-MORT REVIEW.

IN the annual survey of the Australian wool trade for the season of 1911-1912, Goldsbrough, Mort & Company, Ltd., make the point that the regular auction sales of Australian-grown wools may be said to have been initiated in 1811, when the modest amount of 167 pounds of Australian merino wool was offered by public auction at Garraway's Coffee House in London. The review further states :

The days of the big straight lines of merino wools are steadily on the wane, and buyers will find an ever-increasing difficulty in securing parcels of the size that prevailed only comparatively a few years ago. Users as a whole are apparently not so well seized of this phase of the industry as they might be, and it cannot be too strongly emphasized.

The increase of the Australian clip, as stated in bales, is only nominal, and has been without any influence on the market. This is a point worthy of more than usual notice, as it goes to show that the limit of production in Australia has, in all probability, been reached.

This Continent has been blessed with a succession of good seasons, and yet the increase is practically stationary, and when the lean years make their appearance a falling off must be looked for.

The increasing cost of production of the raw material is another factor to be reckoned with, and any material fall in values would, in all probability, be followed by a diminishing clip.

Land values which are steadily rising, necessitating more intense cultivation, to the ultimate displacement of purely pastoral holdings, are also playing their part.

With an ever-increasing demand for wool throughout the world, therefore, the statistical position of the staple at moment of writing is very strong, and prospects for growers, on paper at least, most encouraging.

THE CLIP.

In criticising the clip of 1911, if judged from a growers' standpoint, it must be called essentially good. The climatic con-

ditions under which it was grown were eminently of a very favorable nature, this being exemplified both in the condition of growth and weight of wool cut per head.

Taking the wools from Southern and Western Riverina, it is very questionable whether we have seen them better grown, sounder, or more robust; but on the other hand they were extremely fatty, the quality being a good way removed from former years.

From Eastern Riverina and the Upper Murray, the clip was also heavier in condition and not so fine.

Hay wools were distinctly better grown than last season as regards length and fulness of staple, but carried a good deal more yolk than usual. Darling clips, although somewhat faulty regarding vegetable matter, were again of good length, but in a more wasty condition, those from the Lower Darling, although excellently grown, being certainly rather more earthy.

South-Eastern District of South Australia. Having regard to the unfavorable conditions under which the clip was produced, it could not be expected to be as good as last year, and this was fully borne out, as in the generality of cases it was shorter and thinner, the conditions being generally disappointing.

Pride of place must certainly be given to the Western District clip of Victoria, and not for a number of years have we seen the wools in such perfect order, the growth and length of staple, combined with density, soundness, and robustness, being the main features. Many years may elapse before we see a clip again so eminently adapted for American and Yorkshire requirements as was the one under review.

Last year we spoke highly of the Wimmera wools, and again this season they have merited our high opinion, being most attractive, and showing that the small growers are paying undoubted attention to careful breeding, and producing merino wool of a high-class character.

From Central Queensland, the clips which came immediately before our notice may be described as well grown, as regards length, soundness, and fulness of staple, but they did not present an altogether attractive appearance, being for the most part discolored with what is known as "canary stain" showing up very freely, and not so fine in the hair as their predecessors.

Tasmanian wools as a whole proved disappointing, more especially the merino portion, which is a gradually diminishing quantity, as for the most part they lacked fineness, which is so essential; nor did they present the attractiveness and style of previous years, and they were certainly heavier in condition. Whether through constitutional or climatic conditions (perhaps both) under which the clip was grown, certainly the Northern and Midland wools were not so fine as those from the South.

From Gippsland and the North-Eastern Districts, the wools

were better grown, sounder, and a little lighter in condition, although of a very mixed nature.

In speaking of the clip as a whole, it presented itself on the showroom floors in the following light: an ever-increasing quantity of comebacks and crossbreds, and a diminishing quantity of fine merinos. A generous season has to a great extent been the means of a practical and forcible illustration of the changes in breeding as practised by growers, *i.e.*, the production of a bigger-framed and more robust sheep, with a corresponding falling off in the fineness of quality of the wool.

SHEEP.

We herewith give tables showing the number of sheep in Australia and Tasmania at various periods:

Year.	Sheep.
1860	20,135,286
1865	29,539,928
1870	41,593,612
1875	53,124,209
1880	62,186,702
1885	67,491,976
1890	97,881,221
1895	90,689,727
1900	70,602,995
1901	72,040,211
1902	53,668,347
1903	56,932,705
1904	65,823,918
1905	74,540,916
1906	83,687,655
1907	87,650,263
1908	87,034,266
1909	91,676,281
1910	92,047,015

These figures are taken from official sources, and it will be seen that, with the exception of a small drop in 1908, the numbers in the Commonwealth have steadily increased since 1902.

Below we also give a table which, no doubt, will be of interest. It gives the numbers of sheep in the Commonwealth at three different periods, viz., 1891, 1902, the year in the worst stage of the last drought, and the end of 1910, which is at present the latest official record available.

Year.	Horses.	Cattle.	Sheep.
1891	1,574,795	11,029,499	106,421,168
1902	1,524,601	7,062,742	53,668,347
1910	2,165,866	11,744,714	92,047,015

THE WOOLEN INDUSTRY OF INDIA.

WITH all its vast population India, like tropical countries generally, has only an insignificant production and consumption of wool manufactures. Of actual, important woolen mills in India there are only five, two of which, one at Cawnpore and the other at Dhariwal, in the Punjab, have between them a capital of 32 lakhs of rupees (\$1,036,800), and produce 82 per cent of the total output of the Indian mills. In these two mills cloth for the use of the native army and police is woven, and fabrics of excellent quality are produced, the materials being Australian wool, sometimes pure and sometimes mixed with the Indian fibers. A statement published in the "Daily Consular and Trade Reports" says:

The year 1905 was a record one both as regards the quantity and value of the woolen goods produced. In 1906 and 1907, owing to the high price of wool, there was a considerable shrinkage in production; a distinct recovery was revealed by the statistics for 1908 and 1909, and in 1910 the output was only 0.6 per cent less than in 1905, and the value was greater than in that year. The quantity of woolen goods imported into India is, however, very much greater than the production of the Indian mills. Piece goods and shawls from the United Kingdom and Germany make up the bulk of the imports. The value of the woolen goods imported in 1910 was \$9,700,000, and of the production of Indian mills \$15,700,000. There are, in various places in India, factories for weaving carpets and rugs and of pattu and pashmina, but though these industries are in the aggregate extensive, they are individually small, the weaving being done on hand looms.

The following statement gives detailed particulars of the woolen industry for the years 1908, 1909, and 1910:

	1908.	1909.	1910.
Mills at work (number)	5	5	5
Nominal capital employed.....	\$14,800,000	\$14,800,000	\$16,800,000
Persons employed (number)	3,511	3,392	3,442
Looms (number)	786	809	808
Spindles (number).....	29,221	30,421	31,205
Production (pounds)	3,415,763	3,954,739	4,101,706
" (value)	\$14,600,000	\$14,000,000	\$15,700,000

The exports of woolen goods from India consist almost entirely of carpets and rugs, of which about three-fourths go to the United Kingdom, and the greater part of the remainder to the United States. The values of Indian carpets and rugs exported during 1908, 1909, and 1910 were \$7,700,000, \$6,870,000, and \$8,000,000, respectively.

QUARTERLY REPORT OF THE BOSTON WOOL MARKET
FOR JANUARY, FEBRUARY, AND MARCH, 1912.

DOMESTIC WOOLS. (GEORGE W. BENEDICT.)

	1912.			1911.
	January.	February.	March.	March.
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.				
(WASHED.)				
XX and above	29 @ 30	29 @ 30	29 @ 30	29 @ 30
X	28 @ 29	28 @ 29	28 @ 29	28 @ 28½
½ Blood	34 @ 35	34 @ 35	34 @ 35	32 @ 33
“	33 @ 34	33 @ 34	33 @ 34	31 @ 32
“	34 @ 35	35 @ 36	35 @ 36	31 @ 32
Fine Delaine	30 @ 31	31 @ 32	31 @ 32	32 @ 33
(UNWASHED.)				
Fine	21½ @ 22	21½ @ 22	21½ @ 22	20 @ 21
½ Blood	26½ @ 27	27 @ 28	27 @ 28	27 @ 28
“	26½ @ 27	27 @ 28	27 @ 28	26 @ 27
“	27 @ 27½	28 @ 29	28 @ 29	25 @ 26
Fine Delaine	25 @ 26	26 @ 26½	26 @ 26½	24 @ 25
MICHIGAN, WISCONSIN, NEW YORK, ETC.				
(WASHED.)				
Fine	32 @ 33	33 @ 34	33 @ 34	30 @ 31
½ Blood	31 @ 32	32 @ 33	32 @ 33	30 @ 31
“	33 @ 33½	33½ @ 34½	33½ @ 34½	29 @ 30
Fine Delaine	30 @ 30½	30 @ 31	30 @ 31	31 @ 32
(UNWASHED.)				
Fine	20 @ 20½	20 @ 20½	20 @ 20½	19 @ 20
½ Blood	26 @ 26½	26½ @ 27½	26½ @ 27½	26 @ 27
“	26 @ 27	26½ @ 27½	26½ @ 27½	25 @ 26
“	26 @ 27	27 @ 28	27 @ 28	24 @ 25
Fine Delaine	24 @ 24½	24½ @ 25½	24½ @ 25½	23 @ 24
KENTUCKY AND INDIANA.				
(UNWASHED.)				
½ Blood	26 @ 27	27½ @ 28	27½ @ 28	26 @ 27
“	26½ @ 27½	28 @ 28½	28 @ 28½	25 @ 26
Braid	22½ @ 23½	22½ @ 23½	24 @ 25	21 @ 22
MISSOURI, IOWA, AND ILLINOIS.				
(UNWASHED.)				
½ Blood	25½ @ 26½	26 @ 27	26 @ 27	25 @ 26
“	25½ @ 26½	27 @ 27½	27 @ 27½	23 @ 24
Braid	22½ @ 23½	23 @ 24	24 @ 24½	20 @ 21
TEXAS.				
(SCOURD BASIS.)				
12 months, fine, and fine medium . .	53 @ 55	53 @ 55	53 @ 55	50 @ 52
6 to 8 months, fine	46 @ 48	46 @ 48	46 @ 48	48 @ 49
12 months, medium	47 @ 48	48 @ 50	48 @ 50	48 @ 49
6 to 8 months, medium	41 @ 43	41 @ 43	41 @ 43	43 @ 44
Fall, fine and fine medium	41 @ 43	41 @ 43	41 @ 43	44 @ 45
“ medium	39 @ 41	40 @ 41	40 @ 41	40 @ 41
CALIFORNIA.				
(SCOURD BASIS.)				
Free, 12 months	48 @ 50	48 @ 50	48 @ 50	50 @ 52
“ 6 to 8 months	43 @ 44	43 @ 44	43 @ 44	45 @ 47
Fall, free	38 @ 40	38 @ 40	38 @ 40	40 @ 42
“ defective	32 @ 34	32 @ 34	32 @ 34	33 @ 35
TERRITORY WOOL: Montana, Wyoming, Utah, Idaho, Oregon, etc.				
(SCOURD BASIS.)				
Staple, fine and fine medium	60 @ 62	60 @ 62	60 @ 62	53 @ 55
“ medium	54 @ 56	55 @ 56	55 @ 56	50 @ 52
Clothing, fine and fine medium . . .	50 @ 53	50 @ 53	50 @ 53	48 @ 50
“ medium	48 @ 49	48 @ 50	48 @ 50	43 @ 45
NEW MEXICO. (Spring.)				
(SCOURD BASIS.)				
No. 1	48 @ 50	48 @ 50	48 @ 50	50 @ 51
No. 2	43 @ 44	44 @ 45	44 @ 45	43 @ 44
No. 3	37 @ 39	38 @ 40	38 @ 40	34 @ 35
No. 4	34 @ 36	35 @ 37	35 @ 37	32 @ 33
NEW MEXICO. (Fall.)				
(SCOURD BASIS.)				
No. 1 }				41 @ 42
No. 2 } None here.				35 @ 36
No. 3 }				29 @ 30
No. 4 }				27 @ 28
GEORGIA AND SOUTHERN.				
Unwashed	22 @ 23	22 @ 23	22½ @ 23½	22 @ 23

DOMESTIC WOOL.

Boston, March 30, 1912.

The quarter under review (January, February, March) was marked by a heavy demand for medium wools, especially $\frac{1}{4}$ Blood, resulting in an advance of about 10 to 15 per cent from December quotations in the staple grades, and at this writing wools of this character are decidedly scarce.

Unfortunately the mills at Lawrence, the center of the worsted industry, were practically closed for several weeks owing to the strike of operatives, and this for a time curtailed the consumption of wool. Outside mills, however, were heavily supplied with orders and running overtime; therefore the wool market continued fairly active. Fine and fine medium wools have remained about steady, the stock having been reduced to very moderate proportions.

Reports from the southwest indicate that the early wools may be late in shearing owing to bad weather, and the new Arizona wools have not arrived in any quantity as yet.

Tariff matters are still unsettled, and until this bugaboo is lifted both the textile and wool industries of the country will necessarily be in rather an unsatisfactory state.

GEORGE W. BENEDICT.

PULLED WOOLS. (*Scoured basis.*) (W. A. BLANCHARD.)

	1912.			1911.
	January.	February.	March.	March.
Extra, and Fine A	50 @ 55	51 @ 56	52 @ 58	50 @ 60
A Super	46 @ 48	47 @ 49	47 @ 50	45 @ 48
B Super	43 @ 47	44 @ 48	45 @ 48	40 @ 43
C Super	35 @ 38	35 @ 39	35 @ 40	32 @ 35
Fine Combing	50 @ 55	50 @ 56	52 @ 57	50 @ 52
Medium Combing	45 @ 48	46 @ 48	47 @ 50	45 @ 47
Low Combing	40 @ 43	41 @ 44	42 @ 45	40 @ 42
California, Extra	48 @ 52	48 @ 53	50 @ 53	50 @ 55

REMARKS.

The market for the quarter was steadily active, but the principal transactions were in medium and low wools, as these grades were equally in demand by worsted and woolen manufacturers. In fact, B supers, which at this season of the year are usually offered in a scoured state to carded wool spinners, were largely sold in the grease to combers. The quotations do not include the extreme figures obtained for specialties — like white B supers, for instance, which were sold at 50 to 52 cents on account of shade. While fine wools have not sold as readily as the others, they have met with fair demand from French combers. Sheepskins have generally ruled high, and business for the pullers has been more satisfactory in volume than in profit.

W. A. BLANCHARD.

FOREIGN WOOLS. (MAUGER & AVERY.)

	1912.			1911.
	January.	February.	March.	March.
Australian Combing:				
Choice	40 @ 42	40 @ 42	40 @ 43	40 @ 41
Good	37 @ 38	37 @ 38	38 @ 39	35 @ 37
Average	33 @ 36	33 @ 36	34 @ 36	33 @ 35
Australian Clothing:				
Choice	42 @ 44	42 @ 44	43 @ 44	40 @ 42
Good	38 @ 40	38 @ 40	39 @ 40	35 @ 37
Average	35 @ 37	35 @ 37	36 @ 38	34 @ 36
Sydney and Queensland:				
Good Clothing	41 @ 43	41 @ 43	41 @ 43	36 @ 38
Good Combing	40 @ 43	40 @ 43	40 @ 43	36 @ 38
Australian Crossbred:				
Choice	40 @ 42	40 @ 42	40 @ 43	38 @ 40
Average	34 @ 36	34 @ 36	35 @ 36	33 @ 36
Australian Lambs:				
Choice	42 @ 45	42 @ 45	43 @ 45	42 @ 45
Good	39 @ 40	39 @ 40	39 @ 40	39 @ 40
Good Defective	36 @ 38	36 @ 38	36 @ 38	35 @ 36
Cape of Good Hope:				
Choice	34 @ 36	34 @ 36	34 @ 36	34 @ 35
Average	32 @ 33	32 @ 33	32 @ 33	32 @ 33
Montevideo:				
Choice	34 @ 35	34 @ 35	34 @ 35	36 @ 37
Average	32 @ 33	32 @ 33	32 @ 33	32 @ 33
Crossbred, Choice	34 @ 37	34 @ 37	34 @ 37	36 @ 39
English Wools:				
Sussex Fleece	41 @ 42	41 @ 42	41 @ 42	40 @ 42
Shropshire Hogs	39 @ 40	39 @ 40	39 @ 40	40 @ 42
Yorkshire Hogs	36 @ 37	36 @ 37	36 @ 37	36 @ 38
Irish Selected Fleece	35 @ 36	35 @ 36	35 @ 36	35 @ 36
Carpet Wools:				
Scotch Highland, White	23 @ 24	23 @ 24	23 @ 24	22 @ 23
East India, 1st White Joria	29 @ 31	29 @ 31	29 @ 31	30 @ 31
East India, White Kandahar	26 @ 28	26 @ 28	26 @ 28	25 @ 27
Donskoi, Washed, White	33 @ 35	33 @ 35	33 @ 35	31 @ 33
Aleppo, White	33 @ 34	33 @ 34	33 @ 34	31 @ 33
China Ball, White	23 @ 25	23 @ 25	23 @ 25	22 @ 23
" " No. 1, Open	22 @ 24	22 @ 24	22 @ 24	19 @ 21
" " No. 2, Open	15 @ 17	15 @ 17	15 @ 17	13 @ 15

FOREIGN WOOLS.

The demand for foreign wools during the past quarter has been principally for South American Lincoln and Low Quarter Blood. Dealers have moved their holdings at slight profit and the result of the sales has been a material reduction in stocks.

Australian and New Zealand crossbred wools have also sold quite freely. There has been some inquiry for fine clothing Australian wools, but the combing qualities, from 60s to 80s, have been quite neglected.

Cape wools have been out of stock.

Carpet wools continue strong and prices are held somewhat above buyers' views. The situation abroad on Low Wools indicates very light stocks, and this no doubt is the reason that European holders are so firm in their views of value.

MAY 28, 1912.

BULLETIN

OF THE

National Association of Wool Manufacturers

A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

VOL. XLII.]

BOSTON, SEPTEMBER, 1912.

[No. III.]

THE UNDERWOOD-LA FOLLETTE BILL.

A SUMMARY OF THE FINAL ACTION IN SENATE AND HOUSE,
AND THE EXECUTIVE VETO.

FOR several weeks in July and August of this year 1912 the subject of wool and woollen tariff legislation again held a conspicuous place in Congress. The Underwood bill, bearing the name of Chairman of the Committee on Ways and Means, which had passed the House on April 1 and had been adversely reported on May 23 to the Senate, was called up for consideration in the Senate on July 25, under a unanimous agreement that the bill and all proposed amendments should be disposed of on that day. The measure (H.R. 22195) was identical with the Underwood bill of the year before, and was published in full in the June Bulletin.

On July 24, in preparation for this debate, Senator Cummins, of Iowa, had introduced as a proposed amendment to the Underwood bill a measure of his own, the provisions of which were as follows:

THE CUMMINS SUBSTITUTE.

AMENDMENT intended to be proposed by Mr. Cummins to the bill (H. R. 22195), "An Act to reduce the duties on wool and manufactures of wool," viz.: Strike out all after the enacting clause and substitute therefor the following:

That the Act entitled, "An Act to provide revenue, equalize duties, and encourage the industries of the United

States, and for other purposes," approved August fifth, nineteen hundred and nine, be, and the same is hereby, amended by striking out all of the paragraphs of Schedule K of section one of said Act, from three hundred and sixty to three hundred and ninety-five inclusive, and inserting in place thereof the following:

1. All wools, hair of camel, goat, alpaca, and other like animals shall be divided for the purpose of fixing the duties to be charged thereon, into the three following classes:

2. Class one, that is to say, Merino, mestiza, metz, or metis wools or other wools of Merino blood immediate or remote, down clothing wools, and combing wools of like character with any of the preceding, including Bagdad wool, China lamb's wool, Castel Branco, Adrianople skin wool or butcher's wool, and such as have been heretofore usually imported into the United States from Buenos Aires, New Zealand, Egypt, Australia, Cape of Good Hope, Russia, Great Britain, Canada, Morocco, and elsewhere, and Leicester, Cotswold, Lincolnshire, down combing wools, Canada long wools, or other like wools of English blood, and usually known by the terms herein used, and all wools not hereinafter provided for in class three.

3. Class two, that is to say, all hair of the camel, goat, alpaca, or other like animal, not hereinafter provided for in Class three.

4. Class three, that is to say, Donskoi, Native South American, Cordova, Valparaiso, Native Smyrna, Russian camel's hair and all such wools of like character as have been heretofore usually imported into the United States from Turkey, Greece, Syria, and elsewhere, excepting improved wools hereinafter provided for.

5. The standard samples of all wools or hair which are now, or may be hereafter, deposited in the principal customhouses of the United States, under the authority of the Secretary of the Treasury, shall be the standards for the classification of wools and hair under this Act, and the Secretary of the Treasury is authorized to renew these standards, and to make such additions to them from time to time as may be required, and he shall cause to be deposited like standards in other customhouses of the United States when they may be needed.

6. Whenever wools of class three shall have been improved by the admixture of Merino, or English blood, from their present character, as represented by the standard samples, now or hereafter to be deposited in the principal

customhouses of the United States, such improved wools shall be classified for duty as class one.

7. If any bale or package of wool or hair specified in this Act shall be entered as class three, and shall contain a greater percentage of class one wool, or class two hair, than does the proper standard sample thereof, then the whole bale or package shall be subject to the rate of duty chargeable on wool of class one, or hair of class two, as the case may be; and if any bale or package shall be entered by the importer, or any one duly authorized to make entry thereof, as shoddy, mungo, flocks, wool, hair, or other material, of any class specified in this Act, and such bale or package shall contain any admixture of any one or more of the foregoing, or of any other material, subject to a higher rate of duty, the whole bale or package shall be dutiable at the highest rate imposed by this Act upon any article or material in said bale or package.

8. Whenever in any paragraph of this Act the word "wool" is used in connection with the material or manufactured article of which it is a component material, it shall be held to include wool or hair of sheep, camel, goat, alpaca, or other like animal, whether manufactured by the woollen, worsted, felt, or any other process.

9. The duty on all wools of class one shall be, if scoured, nineteen cents per pound; if in the grease, or in any other condition than scoured and not advanced by any process of manufacture, eighteen cents per pound on the clean wool, which shall be ascertained by scouring or other tests made in accordance with regulations prescribed by the Secretary of the Treasury: *Provided, however,* That in no event shall the duty exceed forty-five per centum ad valorem.

10. The duty on all hair of class two shall be, if scoured, eight cents per pound. If in natural condition or any other condition than scoured, and not advanced by any process of manufacture, seven cents per pound on the clean hair, which shall be ascertained by scouring or other tests made in accordance with regulations prescribed by the Secretary of the Treasury: *Provided, however,* That in no event shall the duty exceed thirty per centum ad valorem.

11. The duty on all wools and camel's hair of class three shall be, if scoured, six cents per pound. If in their natural condition or any other condition than scoured, and not advanced by any process of manufacture, five cents per pound on the clean wool or hair, which shall be ascertained by scouring or other tests made in accordance with regula-

tions prescribed by the Secretary of the Treasury: *Provided, however,* That in no event shall the duty exceed forty per centum ad valorem.

12. The duty on wools or hair on the skin shall be two cents per pound less than is imposed upon the clean wool or hair of class one, two, or three, as the case may be, imported not on the skin and unscoured, the quantity and value to be ascertained under such rules as the Secretary of the Treasury may prescribe.

13. Top waste and slubbing waste, twenty cents per pound.

14. Roving waste, ring waste, and garnetted waste, sixteen cents per pound.

15. Noils, carbonized, fourteen cents per pound; uncarbonized, eleven cents per pound.

16. Thread waste, yarn waste, and wool wastes not herein specified, shoddy, mungo, and wool extract, seven cents per pound.

17. Woolen rags and flocks, three cents per pound.

18. Combed wool or tops made wholly or in part of wool or camel's hair, valued at not more than twenty cents per pound, twelve cents per pound on the wool contained therein; valued at more than twenty cents per pound and not more than thirty cents per pound, sixteen cents per pound on the wool contained therein; valued at more than thirty cents per pound and not more than forty cents per pound, eighteen cents per pound on the wool contained therein; valued at more than forty cents per pound and not more than fifty cents per pound, twenty cents per pound on the wool contained therein; valued above fifty cents per pound, twenty-one cents per pound on the wool contained therein. That on all the foregoing in this paragraph mentioned there shall be paid an additional duty of five per centum ad valorem.

19. Wool and hair which has been advanced in any manner or by any process of manufacture beyond the scoured condition but less advanced than yarn and not specially provided for in this Act, twenty cents per pound on the wool contained therein, and in addition thereto five per centum ad valorem.

20. On yarns made wholly or in part of wool valued at not more than thirty cents per pound the duty shall be fourteen cents per pound on the wool contained therein, and in addition thereto twelve per centum ad valorem; valued at more than thirty cents per pound and not more than fifty

cents per pound the duty shall be eighteen cents per pound on the wool contained therein, and in addition thereto fifteen per centum ad valorem; valued at more than fifty cents per pound and not more than eighty cents per pound the duty shall be twenty-one cents per pound on the wool contained therein, and in addition thereto twenty per centum ad valorem; valued at more than eighty cents per pound the duty shall be twenty-four cents per pound on the wool contained therein, and in addition thereto twenty-five per centum ad valorem.

21. On cloths, knit fabrics, flannels, felts, women and children's dress goods, coat linings, Italian cloths, buntings, and all other fabrics of every description made wholly or in part of wool and not specially otherwise provided for in this Act, valued at not more than thirty cents per pound, the duty shall be sixteen cents per pound on the wool contained therein, and in addition thereto thirty per centum ad valorem; valued at more than thirty cents per pound and not more than forty cents per pound the duty shall be eighteen cents per pound on the wool contained therein, and in addition thereto thirty per centum ad valorem; valued at more than forty cents per pound and not more than sixty cents per pound the duty shall be twenty-two cents per pound on the wool contained therein, and in addition thereto thirty-five per centum ad valorem; valued at more than sixty cents per pound and not more than eighty cents per pound, twenty-six cents per pound on the wool contained therein, and in addition thereto forty per centum ad valorem; valued at more than eighty cents per pound and not more than one dollar per pound, twenty-eight and a half cents per pound on the wool contained therein, and in addition thereto forty-five per centum ad valorem; valued at more than one dollar per pound and not more than one dollar and a half per pound, twenty-eight and a half cents per pound on the wool contained therein, and in addition thereto fifty per centum ad valorem; valued at more than one dollar and a half per pound, twenty-eight and a half cents per pound on the wool contained therein, and in addition thereto fifty-five per centum ad valorem.

22. On blankets and on flannels for underwear, composed wholly or in part of wool, valued at not more than forty cents per pound, the duty shall be eighteen cents per pound on the wool contained therein, and in addition thereto twenty per centum ad valorem; valued at more than forty cents per pound and not more than fifty cents per pound, the duty

shall be twenty cents per pound on the wool contained therein, and in addition thereto twenty-five per centum ad valorem; valued at more than fifty cents per pound, twenty-three cents per pound on the wool contained therein, and in addition thereto thirty per centum ad valorem: *Provided*, That on blankets over three yards in length the same duty shall be paid as on cloths.

23. On ready-made clothing and articles of wearing apparel knitted, woven, or felt of every description made up or manufactured wholly or in part and composed wholly or in part of wool, if valued at not more than forty cents per pound, the duty shall be twenty cents per pound on the wool contained therein, and in addition thereto thirty-five per centum ad valorem; if valued at more than forty cents per pound and not more than sixty cents per pound the duty shall be twenty-two cents per pound on the wool contained therein, and in addition thereto forty per centum ad valorem; if valued at more than sixty cents per pound and not more than eighty cents per pound, twenty-six cents per pound on the wool contained therein, and in addition thereto forty-five per centum ad valorem; if valued at more than eighty cents per pound and not more than one dollar per pound, twenty-six cents per pound on the wool contained therein, and in addition thereto forty-five per centum ad valorem; if valued at more than one dollar per pound and not more than one dollar and a half per pound, twenty-eight and a half cents per pound on the wool contained therein, and in addition thereto fifty per centum ad valorem; if valued at more than one dollar and a half per pound, twenty-eight and a half cents per pound on the wool contained therein, and in addition thereto fifty-five per centum ad valorem.

24. On handmade Aubusson, Axminster, Oriental, and similar carpets and rugs made wholly or in part of wool, fifty-five per centum ad valorem; on all other carpets of every description, druggets, bockings, mats, screens, hassocks, bedsides, art squares, and portions of carpets or carpeting, and all other coverings for floors composed wholly or in part of wool, twenty-five per centum ad valorem.

25. All manufactures made wholly or in part of wool and not specially provided for in this Act, if the component material of chief value is wood, paper, rubber, or any of the baser metals, the duty shall be twenty-two cents per pound on the wool contained therein, and in addition thereto thirty per centum ad valorem. If the component material of chief value is silk, fur, precious or semi-precious stones or gold,

silver or platinum, the duty shall be twenty-two cents per pound on the wool contained therein, and in addition thereto fifty per centum ad valorem. If the component material of chief value be a material not mentioned in this paragraph, the duty shall be twenty-two cents per pound on the wool contained therein, and in addition thereto forty per centum ad valorem.

26. This Act shall take effect on the first day of January, nineteen hundred and thirteen.

ADDRESS OF SENATOR CUMMINS.

Senator Cummins advocated the adoption of his measure in an elaborate speech, expressing the hope that the Senators on his side of the Chamber who professed a willingness to be guided by the advice and information of the Tariff Board would look with favor on his amendment. Mr. Cummins condemned the Underwood bill because in his opinion it did not reach the protective point. The duty of the House bill on wool was 20 per cent. There were some wools that would be amply protected by a duty of 20 per cent, but the greater part of the wool production of this country could not sustain the reduction proposed by the House. He said that the duties upon the manufactures of wool in the House bill approached more nearly the protective point than did the duty on the raw material, but his examination convinced him that the duties on manufactures did not measure the difference between conditions here and abroad.

Senator Cummins added that some of the duties in his proposal were higher than were required by the terms of the Tariff Board report. There were differences of opinion in respect to the proper conclusions to be drawn from the report. He stood ready to vote for any measure that would reduce the duties of the schedule, provided they were not reduced below the fair, protective point. Mathematically the conclusion to be drawn from the report of the Tariff Board was that the average difference in cost of production between American and foreign wool was 15 cents a pound on the clean wool, but he believed that it would be safer and better to advance the duty to 18 cents. Incidentally, Mr.

Cummins said that he had become convinced that it was not possible to ascertain with accuracy the difference between the cost of producing commodities abroad and at home. There was a certain approximation that could be reached, and we should have to content ourselves with that approximation.

Mr. Cummins explained particularly the limitation which his plan put upon the wool duty of a maximum of 45 per cent. The compensatory duty was, therefore, lower than in the bill prepared by the House Republicans.

Senator Heyburn, of Idaho, urged that to reduce the wool duty 25 per cent would put out of business 500,000 people. It was not just a question of the price of carpets or of the price of a coat. It was a question of maintaining a large industry that was attached to the soil, and the labor of the country. When the prosperity of any part of the American people was diminished their purchasing power was diminished also. When people were engaged in raising sheep or producing wool they could not be engaged in other enterprises at the same time. If they were put out of business they became consumers and not producers, and they became consumers without revenue.

The Democratic view of Schedule K was presented in speeches by Senator Simmons of North Carolina, Senator Stone of Missouri, Senator Martine of New Jersey, and others, and the "insurgent" view by Senator Poindexter, of Washington. After some more running debate the Cummins substitute for the Underwood-La Follette bill was rejected on a vote of 14 yeas to 57 nays. The 14 Senators who supported the Cummins proposal were Messrs. Borah, of Idaho; Bourne, of Oregon; Bristow, of Kansas; Clapp, of Minnesota; Crawford, of South Dakota; Cummins, of Iowa; Gronna, of North Dakota; Jones, of Washington; Kenyon, of Iowa; La Follette, of Wisconsin; Nelson, of Minnesota; Poindexter, of Washington; Townsend, of Michigan, and Works, of California. Most of these Senators were of what is ordinarily regarded as the insurgent Republican group.

All of the other Republicans and all of the Democrats voted against the Cummins measure.

THE FINANCE COMMITTEE SUBSTITUTE.

Thereupon Senator Penrose, of Pennsylvania, Chairman of the Committee on Finance, presented another substitute, the result of many conferences with members of the committee and with Senators not members of the committee on the Republican side. Mr. Penrose expressed the hope that this would command the full support of the Republican vote in the Senate. This committee proposal was as follows :

A BILL to amend an Act entitled "An Act to provide revenue, equalize duties, and encourage the industries of the United States, and for other purposes," approved August fifth, nineteen hundred and nine :

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Act entitled "An Act to provide revenue, equalize duties, and encourage the industries of the United States, and for other purposes," approved August fifth, nineteen hundred and nine, be, and the same is hereby amended by striking out all of the paragraphs of Schedule K of section one of said Act, from three hundred and sixty to three hundred and ninety-five, inclusive of both, and inserting in place thereof the following :

1. All wools, hair of the camel, goat, alpaca, and other like animals shall be divided, for the purpose of fixing the duties to be charged thereon, into the three following classes :

2. Class one ; that is to say, merino, mestiza, metz, or metis wools, or other wools of merino blood, immediate or remote, Down clothing wools, and wools of like character with any of the preceding, including Bagdad wool, China lamb's wool, Castel Branco, Adrianople skin wool or butcher's wool, and such as have been heretofore usually imported into the United States from Buenos Aires, New Zealand, Australia, Cape of Good Hope, Russia, Great Britain, Canada, Egypt, Morocco, and elsewhere, and Leicester, Cotswold, Lincolnshire, Down combing wools, Canada long wools, or other like combing wools of English blood, and usually known by the terms herein used, and also hair of the camel, and all wools not hereinafter included in classes two and three.

3. Class two; that is to say, the hair of the Angora goat, alpaca, and other like animals.

4. Class three; that is to say, Donskoi, native South American, Cordova, Valparaiso, native Smyrna, Russian camel's hair, and all such wools of like character as have been heretofore usually imported into the United States from Turkey, Greece, Syria, and elsewhere, excepting improved wools hereinafter provided for.

5. The standard samples of all wools or hair which are now or may be hereafter deposited in the principal customhouses of the United States, under the authority of the Secretary of the Treasury, shall be the standards for the classification of wools and hair under this Act, and the Secretary of the Treasury is authorized to renew these standards and to make such additions to them from time to time as may be required, and he shall cause to be deposited like standards in other customhouses of the United States when they may be needed.

6. Whenever wools of class three shall have been improved by the admixture of merino or English blood from their present character as represented by the standard samples now or hereafter to be deposited in the principal customhouses of the United States, such improved wools shall be classified for duty as class one.

7. If any bale or package of wool or hair specified in this Act invoiced or entered as of any specified class, or claimed by the importer to be dutiable as of any specified class, shall contain any wool or hair subject to a higher rate of duty than the class so specified, the whole bale or package shall be subject to the highest rate of duty chargeable on wool or hair of the class subject to such higher rate of duty, and if any bale or package be claimed by the importer to be shoddy, mungo, flocks, wool, hair, or other material of any class specified in this Act, and such bale contain any admixture of any one or more of said materials, or of any other material, the whole bale or package shall be subject to duty at the highest rate imposed upon any article in said bale or package.

8. The duty on all wools and hair of class one and class two, if imported in the grease, shall be laid upon the basis of their clean content. The clean content shall be determined by scouring tests, which shall be made according to regulations to be prescribed by the Secretary of the Treasury. The duty on all wools and hair of class one, imported in the grease, shall be eighteen cents per pound on the clean content, as defined above. If imported scoured, the duty shall be twenty cents per pound. The duty on all wools and hair

of class two, imported in the grease, shall be thirteen and one-half cents per pound on the clean content, as defined above. If imported scoured, the duty shall be fifteen and one-half cents per pound.

9. The duty on all wools and hair of class three, imported in their natural condition, shall be seven cents per pound; if scoured, nineteen cents per pound: *Provided*, That on consumption of wools and hair of class three, in the manufacture of carpets, druggets and bockings, mats, rugs for floors, screens, covers, hassocks, bedsides, art squares, and portions of carpets or carpeting hereafter manufactured or produced in the United States in whole or in part from wools or hair of class three, upon which duties have been paid, there shall be allowed to the manufacturer or producer of such articles a drawback equal in amount to the duties paid less one per centum of such duties on the amount of the wools or hair of class three contained therein; such drawback shall be paid under such rules and regulations as the Secretary of the Treasury may prescribe.

10. The duty on wools on the skin shall be one cent less per pound than is imposed in this schedule on other wools of the same class and condition, the quantity to be ascertained under such rules as the Secretary of the Treasury may prescribe.

11. Top waste and slubbing waste, twenty-five cents per pound.

12. Roving waste, ring waste, garnetted waste, and all other wastes composed wholly or in part of wool, and not specially provided for in this section, twenty cents per pound.

13. Noils, carbonized, fourteen cents per pound; not carbonized, eleven cents per pound.

14. Thread waste, yarn waste, nine and one-half cents per pound.

15. Shoddy and wool extract, ten cents per pound.

16. Woolen rags, flocks, and mungo, five cents per pound.

17. Combed wool or tops, made wholly or in part of wool or hair, twenty-eight cents per pound.

18. Wool and hair which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, but less advanced than yarn, not specially provided for in this section, twenty-eight cents per pound.

19. Worsted yarns composed wholly or in part of wool, advanced beyond the condition of singles by twisting two or more single yarns together, shall be subject to duty at the

following rates, namely: On number forty, forty-one cents per pound; and two-fifths of one cent per pound additional for every number in excess of number forty; or one-fourth of one cent per pound reduction from forty-one cents for every number less than number forty, to and including number twelve; single worsted yarns shall pay five per centum less duty than that imposed by this paragraph on two or more single worsted yarns of corresponding number twisted together. Woolen yarns in singles, or two or more yarns twisted together shall be subject to a reduction of seven cents per pound, from the duties imposed by this paragraph on corresponding numbers of single or twisted yarns. All of the above when bleached, dyed, colored, stained, painted, printed, gassed, or singed shall pay three cents per pound in addition to the other duties prescribed in this paragraph. The word "number" appearing in this paragraph, whether applied to woolen or worsted yarns, shall be taken to mean five hundred and sixty yards of single yarn to the pound.

20. On cloths, knit fabrics, flannels, felts, and all manufactures of every description made wholly or in part of wool, not specially provided for in this section, valued at not more than twenty cents per pound, the duty shall be twelve cents per pound, and in addition thereto twenty-five per centum ad valorem;

Valued at more than twenty cents and not more than thirty cents per pound, sixteen cents per pound, and in addition thereto thirty-five per centum ad valorem;

Valued at more than thirty cents and not more than forty cents per pound, twenty cents per pound, and in addition thereto thirty-five per centum ad valorem;

Valued at more than forty cents and not more than fifty cents per pound, twenty-four cents per pound, and in addition thereto forty-five per centum ad valorem;

Valued at more than fifty cents and not more than sixty cents per pound, twenty-eight cents per pound, and in addition thereto forty-five per centum ad valorem;

Valued at more than sixty cents and not more than eighty cents per pound, thirty-two cents per pound, and in addition thereto fifty per centum ad valorem;

Valued at more than eighty cents per pound, thirty-five cents per pound, and in addition thereto fifty-five per centum ad valorem: on all the foregoing composed in part of wool, but in chief value of any other material, sixty-five per centum ad valorem.

21. On blankets composed wholly or in part of wool,

valued at not more than thirty cents per pound, the duty shall be sixteen cents per pound, and in addition thereto twenty-five per centum ad valorem;

Valued at more than thirty cents and not more than forty cents per pound, eighteen cents per pound, and in addition thereto thirty per centum ad valorem;

Valued at more than forty cents and not more than fifty cents per pound, twenty-two cents per pound, and in addition thereto thirty per centum ad valorem;

Valued at more than fifty cents per pound, twenty-six cents per pound, and in addition thereto thirty-five per centum ad valorem:

Provided, That on blankets over three yards in length the same duties shall be paid as on cloths.

22. On women's and children's dress goods, coat linings, Italian cloths, and goods of similar description and character, of which the warp consists wholly of cotton or other vegetable material with the remainder of the fabric composed wholly or in part of wool, the duty shall be seven cents per square yard; on women's and children's dress goods, coat linings, Italian cloths, bunting, and goods of similar description or character composed wholly or in part of wool, and not specially provided for in this section, the duty shall be eleven cents per square yard, and in addition thereto on all the foregoing fifty per centum ad valorem: *Provided*, That on all the foregoing weighing over four ounces per square yard the duty shall be the same as imposed by this schedule on cloths.

23. On clothing, ready-made, and articles of wearing apparel of every description, except such as are knitted, made up or manufactured wholly or in part, felts not woven, and not specially provided for in this section, webbings, gorings, suspenders, braces, bandings, beltings, bindings, braids, galloons, edgings, insertings, flouncings, fringes, gimps, cords, cords and tassels, ribbons, ornaments, laces, trimmings, and articles made wholly or in part of lace, embroideries, and all articles embroidered by hand or machinery, head nets, nettings, buttons or barrel buttons or buttons of other forms for tassels or ornaments, and manufactures of wool ornamented with beads or spangles of whatever material composed, any of the foregoing made of wool or of which wool is a component material, whether containing india rubber or not, sixty-five per centum ad valorem.

24. On knitted wearing apparel of every description, and all knitted articles and manufactures thereof, valued at eighty cents per pound or more, composed wholly or in chief

value of wool, twenty-four cents per pound, and in addition thereto forty-five per centum ad valorem; if valued at less than eighty cents per pound, twenty-four cents per pound, and in addition thereto thirty-five per centum ad valorem; on all the foregoing composed in part of wool, but in chief value of any other material, sixty per centum ad valorem.

25. On handmade Aubusson, Axminster, Oriental, and similar carpets and rugs, made wholly or in part of wool, the rate of duty shall be fifty per centum ad valorem; on all other carpets of every description, druggets, bockings, mats, rugs for floors, screens, covers, hassocks, bedsides, art squares, and portions of carpets or carpeting made wholly or in part of wool, the duty shall be thirty per centum ad valorem.

26. Whenever, in any schedule of this Act, the word "wool" is used in connection with a manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, goat, alpaca, or other like animal, whether manufactured by the woollen, worsted, felt, or any other process.

27. The foregoing paragraphs, providing the rates of duty herein for manufactures of wool, shall take effect on the first day of January, nineteen hundred and thirteen.

A REPUBLICAN REDUCTION.

Senator Penrose read a statement describing the new measure, in which he said:

This amendment is an attempt to make the duties on wool and woolens conform as nearly as possible to the information on that subject which has been furnished in the recent report of the Tariff Board. Schedule K, on account of having a duty on the raw material (wool) and also on the finished product (cloth), has always presented great difficulties. The problem has been how to divide into their respective classes the great variety of articles to which the duties apply and still have rates that would be adequately protective to all articles without being excessive as to some.

In this amendment, by following the suggestions of the Tariff Board and putting the wool duty on the clean content of the wool instead of on the wool in the grease, it has been possible to write a measure in which the duties on cloths have been much more evenly distributed than in the present law. The Republican members of the Finance Committee, therefore, are able to present an amendment which they believe has a lower range of duties on all manufactured products,

and in no case, so far as they have been able to study the subject, increases the duties. On cloths, for instance, the duties have been reduced from in the neighborhood of 10 per cent on the high-priced and expensive fabrics, which may be classed as luxuries, to as much as approximately 125 per cent * on the lower and cheaper grades. On blankets of the higher grades there are reductions running from 12 per cent to 24 per cent and on some of the cheaper qualities, where the value runs from 30 cents to 40 cents per pound, the present duties in many cases have been almost cut in half. The duties on yarns show a reduction of from 8 per cent to 45 per cent under the different conditions of the market. In the same way the duties on tops will show reductions running from 35 per cent to a little over 50 per cent. In spite of these very considerable reductions as applied to the different schedules of the bill, it is believed it will still afford adequate protection to the two great industries — wool growing and wool manufacturing — and that if it should be enacted into law, it would enable both the farmer, the manufacturer, and wage-earners engaged in this industry to continue to derive their livelihood from those pursuits in which they have been so long engaged and at the same time meet the demands on the part of the consumer for a revision of this schedule.

Senator Penrose added that his proposal was based on the report of the Tariff Board — it was a measure of fair protection and yet a revision downward. It was conceded that Schedule K had been on the statute books for many years practically without change, except for a few minor alterations. The proposal represented the general thought of those Senators on his side of the Chamber on behalf of whom, as Chairman of the Committee, he had introduced the amendment.

The sudden appearance of the measure and the brief time allowed for consideration of it were points of criticism made from the Democratic side by Senator Williams, of Mississippi, and Senator Stone, of Missouri, while the measure was championed by Senator Smoot, of Utah, and Senator Lippitt, of Rhode Island. Senator Penrose answered that such criticism

* This meant the difference between the rates, it was explained, not the per cent of reduction.

might be justified, but that the Senate should make allowance for the difficulties under which the committee had labored. When it came to solving the details of a proposal, wide diversity was found to exist in the opinions of Senators, as was inevitable in the case of an industry that covered the continent, from the grower on the slopes of the Rocky Mountains and the plains to the manufacturers of the East. But it was agreed that some action was necessary, because after the Tariff Board had reported an obligation existed for some action on the part of the Republicans.

A vigorous debate followed on the Penrose substitute, participated in by Senator Heyburn, of Idaho, Senator McCumber, of North Dakota, Senator Clapp, of Minnesota, Senator Bristow, of Kansas, and others. Senator Cummins announced that inasmuch as he knew that the amendment would materially reduce duties which he believed to be excessive, he intended to vote for the amendment, although he preferred his own. He pointed out that there were marked reductions in the duties on cloths and fabrics in general. Senator Townsend, of Michigan, made a similar announcement. At the end of the debate the substitute presented by Senator Penrose was adopted on a vote of 34 yeas and 32 nays. All of the affirmative votes were those of Republicans, including Senators Borah, Bourne, Bristow, Crawford, Cummins, Gronna, Jones, Nelson, Poindexter, Townsend, and Works, who had supported the Cummins bill. On the other hand, Senators Clapp, Kenyon, and La Follette voted with the Democrats against the Penrose measure.

THE LA FOLLETTE BILL AGAIN.

When the bill was reported to the Senate, Senator Cummins offered an amendment providing for a tariff commission — the tariff commission bill as it passed the Senate in 1910. This amendment was adopted by a vote of 40 to 26, Senator Heyburn, of Idaho, being the only Republican who opposed it.

At this point Senator La Follette of Wisconsin took a step that had not been unanticipated, by offering as a substitute

for the Penrose bill the La Follette wool and woolen bill of the previous session of Congress, as follows :

AMENDMENT proposed by Mr. La Follette to the bill (H. R. 22195) to reduce the duties on wool and manufactures of wool, viz. : Strike out all after the enacting clause and insert the following :

That the Act approved August fifth, nineteen hundred and nine, entitled "An Act to provide revenue, equalize duties, and encourage the industries of the United States, and for other purposes," is hereby amended by striking out all of Schedule K thereof, being paragraphs three hundred and sixty to three hundred and ninety-five, inclusive, and inserting in lieu thereof the following :

SCHEDULE K. WOOL AND MANUFACTURES THEREOF.

360. All wool, hair of the camel, goat, alpaca, and other like animals, shall be divided, for the purposes of this Act, into the two following classes :

361. Class one, that is to say, merino, mestiza, metz, or metis wools, or other wools of merino blood, immediate or remote, Down clothing wools, and wools of like character with any of the preceding, including Bagdad wool, China lamb's wool, Castel Branco, Adrianople skin wool, or butcher's wool, and such as have been heretofore usually imported into the United States from Buenos Aires, New Zealand, Australia, Cape of Good Hope, Russia, Great Britain, Canada, Egypt, Morocco, and elsewhere, Leicester, Cotswold, Lincolnshire, Down combing wools, Canada long wools, or other like combing wools of English blood and usually known by the terms herein used, and all wools not herein-after included in class two.

362. Class two, that is to say, Donskoi, native South American, Cordova, Valparaiso, native Smyrna, and all such wools of like character as have been heretofore usually imported into the United States from Turkey, Greece, Syria, and elsewhere, excepting improved wools hereinafter provided for; the hair of the camel, Angora goat, alpaca, and other like animals.

363. The standard samples of all wools which are now or may be hereafter deposited in the principal customhouses of the United States, under the authority of the Secretary of the Treasury, shall be the standards for the classification of wools under this Act, and the Secretary of the Treasury is

authorized to renew these standards and to make such additions to them from time to time as may be required, and he shall cause to be deposited like standards in other custom-houses of the United States when they shall be needed.

364. Whenever wools of class two shall have been improved by the admixture of merino or English blood, from their present character as represented by the standard samples now or hereafter to be deposited in the principal customhouses of the United States, such improved wools shall be classified for duty as class one.

365. The duty on wools of the first class shall be thirty-five per centum ad valorem.

366. The duty upon wools of class two shall be ten per centum ad valorem.

367. The duty on wools on the skin shall be as follows: Class one, thirty per centum ad valorem; class two, ten per centum ad valorem; the quantity and value of the wool to be ascertained under such rules as the Secretary of the Treasury may prescribe.

368. Top waste, slubbing waste, roving waste, ring waste, and garnetted waste, thirty per centum ad valorem.

369. Shoddy, noils, wool extract, yarn waste, thread waste, and all other wastes composed wholly of wool or of which wool is the component material of chief value, and not specially provided for in this section, twenty-five per centum ad valorem.

370. Woolen rags, mungo, and flocks, twenty-five per centum ad valorem.

371. Combed wool or tops, and all wools which have been advanced in any manner or by any process of manufacture beyond the washed or scoured condition, not specially provided for in this section, forty per centum ad valorem.

372. On yarns made wholly of wool or of which wool is the component material of chief value, the duty shall be forty-five per centum ad valorem.

373. On cloths, knit fabrics, blankets, and flannels for underwear, composed wholly of wool or of which wool is the component material of chief value, women's and children's dress goods, coat linings, Italian cloths, bunting, clothing, ready made, and articles of wearing apparel of every description, including shawls, whether knitted or woven, and knitted articles of every description made up or manufactured wholly or in part, felts not woven, and not specially provided for in this section, webbings, gorings, suspenders, braces, bandings, beltings, bindings, braids, galloons, edgings, insertings,

flouncings, fringes, gimps, cords and tassels, ribbons, ornaments, laces, trimmings, and articles made wholly or in part of lace, embroideries and all articles embroidered by hand or machinery, head nets, nettings, buttons or barrel buttons or buttons of other forms for tassels or ornaments, and manufactures of wool ornamented with beads or spangles of whatever material composed, any of the foregoing made of wool or of which wool is the component material of chief value, whether containing india rubber or not, fifty-five per centum ad valorem.

374. Aubusson, Axminster, moquette, and chenille carpets, figured or plain, and all carpets or carpeting of like character or description; Saxony, Wilton, and Tournay velvet carpets, figured or plain, and all carpets or carpeting of like character or description; Brussels carpets, figured or plain, and all carpets or carpeting of like character or description; velvet and tapestry velvet carpets, figured or plain, printed on the warp or otherwise, and all carpets or carpeting of like character or description; tapestry Brussels carpets, figured or plain, and all carpets or carpeting of like character or description, printed on the warp or otherwise; treble ingrain, three-ply, and all chain Venetian carpets; wool Dutch and two-ply ingrain carpets; carpets of every description, woven whole for rooms; oriental, Berlin, Aubusson, Axminster, and similar rugs; druggets and bockings, printed, colored, or otherwise; all the foregoing, made of wool, or of which wool is the component material of chief value, thirty-five per centum ad valorem.

375. Carpets and carpeting of wool or of which wool is the component material of chief value, not specially provided for in this section, thirty-five per centum ad valorem.

376. Mats, rugs for floors, screens, covers, hassocks, bed-sides, art squares, and other portions of carpets or carpeting made wholly of wool or of which wool is the component material of chief value, and not specially provided for in this section, shall be subjected to the rate of duty herein imposed on carpets or carpeting of like character or description.

377. Whenever, in any schedule of this Act, the word "wool" is used in connection with a manufactured article of which it is a component material, it shall be held to include wool or hair of the sheep, camel, goat, alpaca, or other animal, whether manufactured by a woollen, worsted, felt, or any other process.

378. All manufactures of hair of the camel, goat, alpaca,

or other like animal, or of which any of the hair mentioned in paragraph three hundred and sixty-three form the component material of chief value, shall be subject to a duty of thirty per centum ad valorem.

SECT. 2. That on and after the day when this Act shall go into effect all goods, wares, and merchandise previously imported, and hereinbefore enumerated, described, and provided for, for which no entry has been made, and all such goods, wares, and merchandise previously entered without payment of duty and under bond for warehousing, transportation, or any other purpose, for which no permit of delivery to the importer or his agent has been issued, shall be subjected to the duties imposed by this Act and no other duty, upon the entry or the withdrawal thereof.

SECT. 3. That all Acts and parts of Acts in conflict with the provisions of this Act be, and the same are hereby, repealed. This Act shall take effect and be in force on and after the first day of January, nineteen hundred and thirteen.

After some sharp debate and maneuvering, in which an amendment embodying the tariff commission bill offered by Senator Lodge, of Massachusetts, was rejected by a vote of 31 yeas and 35 nays, and another amendment repealing the Canadian reciprocity treaty offered by Senator McCumber, of North Dakota, was rejected by a vote of 30 yeas and 36 nays, the La Follette bill was substituted for the Penrose bill by a vote of 39 yeas to 27 nays. The affirmative vote was made up of the Democratic Senators and also of Senators Borah, Bristow, Clapp, Crawford, Cummins, Gronna, Kenyon, La Follette, Poindexter and Works, "insurgent" Republicans. All the votes against the bill were those of Republican Senators. On a subsequent vote of 40 yeas and 26 nays on the passage of the bill, Senator Bourne, of Oregon, cast his vote in the affirmative.

THE LA FOLLETTE BILL IN THE HOUSE.

On July 30, Chairman Underwood of the Committee on Ways and Means called up in the House of Representatives the wool and woolen bill as amended in the Senate by the adoption of the La Follette substitute. Representative Payne, of New York, former Chairman and Republican

leader of the minority of the Committee on Ways and Means, moved to strike out all after the enacting clause of the La Follette bill and to insert as an amendment the Payne-Hill bill, offered last March as a substitute for the Underwood bill in the House of Representatives and published in full in the June Bulletin. Mr. Payne said that the author of the La Follette bill had confessed a year ago that he was working with blacksmith's tools, or, in other words, that he had not sufficient information. Since then the Tariff Board had presented a report that was commended the world over. Mr. Payne urged that the bill which he himself offered would allow the wheels of progress to go on, would not destroy any industry, and at the same time would take away every excessive duty in the schedule. In closing, Mr. Payne quoted a telegram from one of his constituents, Mr. A. M. Patterson, of the Waterloo Woolen Manufacturing Company, who said: "The La Follette bill will close or seriously injure every woolen mill in your district."

Representative Hill of Connecticut, a member of the Committee on Ways and Means, advocated the passage of the bill of the minority of the committee as a measure protective in every item and yet lower than the Democratic bill so far as the whole schedule was concerned. Representative McCall, of Massachusetts, another member of the committee, spoke in favor of the Payne-Hill amendment and said that if both parties agreed to a measure that was neither Republican nor Democratic, then no party could be held responsible. The La Follette bill did not accord with the Tariff Board report as to rates upon many important items, and especially in the character of the duties. The Tariff Board had recommended specific duties and the La Follette bill was made up of ad valorem duties.

Chairman Underwood urged that his own measure was preferable in every way to the La Follette bill, which made practically no reduction on raw wool but did make a reduction on the finished product. The burden of the La Follette bill on the manufacturer would be heavier because of the high tax on raw wool and because of the reduction on the

finished product than the Democratic tariff bill would be. There was a broader margin between the Democratic wool duty and the duty on the finished product than there was in the La Follette amendment, though the Democratic bill on the whole was lower than the Senate bill and would be a less burden on the American people.

The vote on Mr. Payne's motion to substitute the Payne-Hill bill for the La Follette bill was 77 yeas to 159 nays — several Western "insurgent" Republicans voting with the Democrats.

Representative Crumpacker, of Indiana, moved that the House concur in the Senate amendment. Mr. Crumpacker said that he was anxious for his amendment to prevail because he believed that it meant legislation. He regarded the bill offered by Mr. Payne as perhaps the most equitable and carefully prepared measure that had been submitted for consideration, but he believed that if adopted as a substitute it would go into conference and the prospect of agreement and effective action would be remote.

On the motion of Mr. Crumpacker there were 56 yeas and 179 nays — and this vote under the House rules had the effect of passing the motion of Chairman Underwood to disagree to the Senate amendment.

AGAIN IN THE SENATE.

On August 1, the action of the House in disagreeing to the La Follette bill was laid before the Senate, and Senator Simmons, of North Carolina, a Democratic leader of the Committee on Finance, moved that the Senate insist upon its amendment and asked for a conference with the House. The motion was adopted and Senators La Follette, of Wisconsin, Bailey, of Texas, and Simmons, of North Carolina, were appointed conferees on the part of the Senate. The House on the same day, on the motion of Mr. Underwood, agreed to the conference, and Chairman Underwood and Representatives Shackelford and Payne were appointed conferees.

Agreement was speedily reached by the Conference Com-

mittee on the same compromise between the original Underwood and the original La Follette bills which was presented a year before and vetoed by the President — the only change being in the addition of a few words that did not alter rates. Mr. Payne refused to sign the conference report, which was accepted on August 2 in the House and on August 5 in the Senate. Senator La Follette in presenting the report explained its details and attacked the recommendation of the Tariff Board on the subject of ad valorem duties. To fortify his assault upon the Tariff Board Mr. La Follette introduced and had printed in the "Record" certain criticisms of the Board by Samuel S. Dale, editor of the "Textile World-Record" of Boston. Mr. Dale's attack had previously been published in the "Record" by Representatives Fitzgerald, of New York, and Senator Simmons, of South Carolina, both Democrats and enemies of the protective system.

Senator Cummins, of Iowa, announced that though a year ago he voted for a conference report identical with the one now proposed, he could not again do this because he had reached the conclusion from a study of the Tariff Board report that the proposed duty on raw wool was non-protective.

On Mr. La Follette's motion to adopt the conference report, there were 35 yeas and 28 nays — "insurgent" Senators Bristow, Clapp, Crawford, Gronna, La Follette, and Works voting in the affirmative with the Democrats.

PRESIDENT TAFT'S VETO MESSAGE.

The adoption of the conference report and the passage of the Underwood-La Follette bill aroused little alarm in the country because it was generally assumed that the measure would encounter the veto of the Executive. President Taft lost no time in preparing his veto message and sending it to Congress. This message was presented on August 9 in the House of Representatives, as follows :

To the House of Representatives :

On December 20, 1911, I sent a message to the Congress, recommending a prompt revision of the tariff on wool and

woolens. I urged a reduction of duties which should remove all the excesses and inequalities of the schedule, but should leave a degree of protection adequate to maintain the continued employment of machinery and labor already established in that great industry. With that message I transmitted a report of the Tariff Board, which furnished for the first time the information needed to frame a revision bill of this character, and recommended that legislation should be at once undertaken in the light of this information.

Despite the efforts which have been made to discredit the work of the Tariff Board, their report on this schedule has been accepted, with scarcely a dissenting voice, by all those familiar with the problems discussed, including active representatives of organizations formed in the interest of the public and the consumer. Importers and merchants, as well as producers and manufacturers, have testified to the accuracy and impartiality of these findings of fact. For the first time in the history of American tariffs the opportunity has been afforded of securing a revision based on established facts, independent both of the *ex parte* statements of interested persons and the guesswork of political theorists.

My position has been made perfectly plain. I shall stand by my pledges to maintain a degree of protection necessary to offset the difference in cost of production here and abroad, and will heartily approve of any bill reducing duties to this level. Bills have been introduced into Congress, carefully framed and based on the findings of the Tariff Board, which, while maintaining the principle of protection, have provided for sweeping reductions. Such a bill was presented by the minority members of the Ways and Means Committee, which, while providing protection to the wool grower, reduces the duty on most wools 20 per cent, and the duties on manufactures by from 20 to more than 50 per cent, and gives in many instances less net protection to the manufacturer than was granted by the Gorman-Wilson free-wool act of 1894.

Instead of such a measure of thorough and genuine revision, based on full information of the facts, and with rates properly adjusted to all the different stages of the industry, there is now presented for my approval H. R. 22195, "An act to reduce the duties on wool and the manufactures of wool," a bill identical with the one which I vetoed in August, 1911, before the report of the Tariff Board had been made. The Tariff Board's report fully and completely justifies my veto of that date. The amount of *ad valorem* duty necessary to offset the difference in the cost of production of

raw wool here and abroad varies with every grade of wool. Consequently, an ad valorem rate of duty adjusted to meet the difference in the cost of production of high-priced wools is not protective to low-priced wools. In any case, the report of the Tariff Board shows that the ad valorem duty of 29 per cent on raw wool, imposed in the bill now submitted to me, is inadequate to meet this difference in cost in the case of four-fifths of our total wool clip. The disastrous effect upon the business of our farmers engaged in wool raising cannot be more clearly stated. To maintain the status quo in the wool-growing industry, the minimum ad valorem rate necessary, even for high-grade wool in years of high prices, would be 35 per cent.

The rate provided in this bill on cloths of all kinds is 49 per cent. The amount of net protection given by this rate, in addition to proper compensation for the duty on wool, depends on the ratio between the cost of the raw material and the cost of making the cloth. The cost of the raw material in woolen and worsted fabrics varies in general from 50 per cent to 70 per cent of the total value of the fabric. Consequently, the net protective duty, with wool at 29 per cent, would vary from 28.7 per cent to 34.5 per cent. In the great majority of cases these rates are inadequate to equalize the difference in the cost of manufacture here and abroad. This is especially true of the finest goods involving a high proportion of labor cost. One of the striking developments of the last few years has been the growth in this country of a fine goods industry. The rates provided in this bill, inadequate as they are for most of the cloths produced in this country, would make the continuance here of the manufacture of fine goods an impossibility.

Even more dangerous in their effects are the rates proposed on tops and yarns. Tops are the result of the first stage in the making of raw wool into cloth. Yarn is the result of the second stage. Taken in connection with a rate of 29 per cent on wool, and 49 per cent on cloths, the rates of 32 per cent on tops and 35 per cent on yarn, fixed in this bill, seem impossible of justification. They would disrupt, and to no purpose, the existing adjustment, within the industry, of all its different branches. It is improbable in the highest degree that raw wool would be imported in great quantities when the cloth maker can import his tops at a duty of 32 per cent and yarns at a duty of 35 per cent. The report of the Tariff Board shows the difference in relative costs to be uniformly greater than the amount of protection on yarns given

by this bill. In a year of low prices, the net protection granted by the proposed rates would not be more than half the difference in costs. The free wool act of 1894 gave a protective rate of 40 per cent on all yarns over 40 cents a pound in value, with free raw material. The present bill gives only 35 per cent on such yarns with a duty of 29 per cent on the raw material. The great increase in the imports of tops and yarns which would result from the rates in the bill now submitted to me, would destroy the effect of the protection to raw wool and at the same time would be at the cost of widespread disaster to the wool-combing and spinning branches of the industry. The last 15 years have witnessed a great growth of top making and worsted spinning in this country, and the capacity of the plants is now equal to domestic requirements. Under the rates proposed such plants could be continued, if at all, only by writing off most of the investment as a net loss and by a reduction of wages. To sum up, then, most of the rates in the submitted bill are so low in themselves that if enacted into law the inevitable result would be the irretrievable injury to the wool-growing industry, the enforced idleness of much of our wool-combing and spinning machinery, and of thousand of looms, and the consequent throwing out of employment of thousands of workmen.

In view of these facts, in view of the platform upon which I was elected, in view of my promise to follow and maintain the protective policy, no course is open to me but to withhold my approval from this bill. I am very much disappointed that such a bill is a second time presented to me. I have inferred from the speeches made in both the House and the Senate that the members of the majority in both Houses are deeply impressed with the necessity of reducing the tariff under the present act on wool and woollens; that they do not propose to stand on the question of the amount of reduction or to insist that it must be enough necessarily to satisfy the principle of tariff for revenue only, but that they are willing to accept a substantial reduction in the present rates in order that the people might be relieved from the possibility of oppressive prices due to excessive rates. I strongly desire to reduce duties, provided only the protection system be maintained, and that industries now established be not destroyed. It now appears from the Tariff Board's report, and from bills which have been introduced into the House and the Senate, that a bill may be drawn so as to be within the requirements of protection and still offer a reduction of 20 per cent on most

wool and of from 20 per cent to 50 per cent on cloths. I cannot act upon the assumption that the controlling majority in either House will refuse to pass a bill of this kind, if in fact it accomplishes so substantial a reduction, merely because members of the opposing party and the Executive unite in its approval. I therefore urge upon Congress that it do not adjourn without taking advantage of the plain opportunity thus substantially to reduce unnecessary existing duties. I appeal to Congress to reconsider the measure, which I now return, without my approval, and to adopt a substitute therefor making substantial reductions below the rates of the present act, which the Tariff Board shows possible, without destroying any established industry or throwing any wage earners out of employment, and which I will promptly approve.

WM. H. TAFT.

THE WHITE HOUSE, August 9, 1912.

THE VETO SUSTAINED BY THE SENATE.

Chairman Underwood, after the message had been read, asked that it lie on the Speaker's table to be called up at a later date, and that it be printed in the "Record" and as a document.

On August 13 Chairman Underwood called up the veto message in the House. By a vote of 174 yeas to 80 nays, with 10 not voting, the Underwood-La Follette bill was passed over the veto of the President, on a sharply criticised ruling by Speaker Champ Clark that the ten members who answered "present" were not to be counted. This doubtful action gave a narrow victory to the Democratic-insurgent combination by a margin of five votes. Sixty Republican Representatives were absent and 21 "insurgent" Republicans voted with the Democrats, as follows: Messrs. Akin, of New York; Anderson, Davis, Lindbergh, Miller, Steenerson and Stevens, of Minnesota; Anthony, Rees and Young, of Kansas; Cooper and Morse, of Wisconsin; Haugen and Woods, of Iowa; Helgesen, of North Dakota; Kent, of California; Lafferty, of Oregon; La Follette and Warburton, of Washington; Norris and Sloan, of Nebraska.

In the Senate, on August 16, Senator Simmons, Democrat,

of North Carolina, moved the passage of the bill, the veto of the President notwithstanding, Senator La Follette, of Wisconsin, and Senator Williams, of Mississippi, advocated this course. On the vote, the yeas were 39 and the nays 36, and the bill failed to pass, falling far short of the requisite two-thirds majority. Thus the effort of the anti-protectionists aided by sectional protectionists solicitous for the farm but heedless of the factory came to naught, so far as the wool and woolen industry was concerned, in the sixty-second Congress.

THE LAWRENCE STRIKE OF 1912.¹

DURING the early months of 1912 one of the fiercest, most dramatic, and most widely advertised industrial conflicts ever fought in New England was waged for nine weeks in Lawrence, the great center of the country's worsted industry. For the first time, leaders of the most recent propaganda amongst labor men — syndicalism or the industrial union — appeared in the extreme East, introducing methods both novel and spectacular, which constantly focused the attention of the laboring, as well as the political, class on the conflict and the combatants.

The mills involved in the strike, with the number of their employees when running at full capacity, were the Everett, with 2500, the Atlantic, with 1300, and the Pemberton and Lawrence Duck, each with 500 employees, which use cotton as their sole raw material. There were also the Washington, with 6500, the Wood, with 5200, the Ayer, with 2000, and the Prospect, with 500 employees — controlled by the American Woolen Company; the Arlington, with 7900, the Pacific, with 5200, the Kunhardt, with 1000, and the local plant of the United States Worsted Company, with 800 employees, whose chief raw material is wool.

RAPID INCREASE OF ILLITERATE IMMIGRANTS.

Prior to 1895 the population of Lawrence, originally almost exclusively native born or Irish, was largely increased by immigration from England, Germany, and French Canada. In 1905 the city contained 70,000 people, of whom 32,000 were foreign born. Five years later the population had been

¹ In the following pages I have attempted to tell in a truthful manner the story of the great labor outbreak which convulsed Lawrence last winter, attracted widespread attention, and provoked discussions in the halls of Congress. It has not been my aim to give an interpretation of this attempt on the part of the leaders to overthrow the present industrial organization, but simply to assemble and present the facts, many of which have not, up to this time (July), appeared in print. I may add that this article was prepared with no thought of having it appear in this Bulletin. — *J. B. McP.*

increased by more than fifteen thousand, the foreign born then numbering 41,000. The full significance of this increase of nine thousand in the foreign-born population is not disclosed by the figures themselves. It lies in the fact that the inpouring hosts no longer came from Teutonic stock in the countries of northern and western Europe, but chiefly from the countries of southeastern Europe and from Asia Minor. During the half decade the Italian population more than doubled. The increase of the Polanders showed even a larger percentage, while the Lithuanians more than trebled their number.

According to the census of 1910, the population of Lawrence was made up of 600 Armenians, 700 Portuguese, 1200 French Belgians, 2100 Poles, 2300 Scotch, 2500 Hebrews, 2700 Syrians, 3000 Lithuanians, 6500 Germans, 8000 Italians, 9000 English, 12,000 French Canadians, 12,000 Americans, and 21,000 Irish, 86 per cent of the entire population being of foreign parentage.

This polyglot population increased too rapidly for the city properly to care for and assimilate it. Lawrence, to adopt the words Professor Ripley applied to the whole country, "has had to do not with the slow process of growth by deposit and accretion, but with violent and volcanic dislocation — a lava flow of population suddenly cast forth from Europe." Thousands of the newcomers — and the majority of them have been in the country less than three years — are either unmarried or have left their families in their old homes. Chiefly rural, they are illiterate folk, who have come with no purpose to settle in the country and become American citizens. On the contrary, they are a mobile, migratory crowd, with no permanent interest in any industry, or city, or in the country itself, their chief aim being to earn the largest amount under existing conditions, live upon the basis of minimum cheapness, and save the largest possible sum from their wages, with which to return to their native shores and establish themselves either in business or as land owners.

Unable to read or to speak the English language, these

people are nevertheless great consumers of European revolutionary literature. Unacquainted with our customs; possessing ideals and views of life radically different from ours; of a highly excitable temperament; natives of countries where no representative government exists, and where revolutionary intrigue is a daily occupation, they furnished a fine field for operations by a bold, able, and commanding set of revolutionary leaders. Given a cause and leadership, and there was sure to be an explosion of no mean dimension among these heterogeneous people.

THE OUTBREAK AND THE REASON GIVEN FOR IT.

Neither cause nor leader was wanting. The ostensible reason for the outbreak was the taking effect on January 1, 1912, of the law prohibiting the employment in factories of women and children — young persons under eighteen years — more than 54 hours a week, accompanied by a reduction of earnings corresponding to the reduced working time. This bill was passed by the General Court, and approved by the Governor May 27, 1911. Suspension of work on the part of the two classes named made it unprofitable to continue to move machine on the 56-hour schedule in the departments where adult men predominated. The enactment of this law was urged by organized labor in the State, and was opposed by manufacturers as unwise further interference with the industries of the Commonwealth, because it would be an additional handicap from which competitors in other States permitting the operation of their factories from two to four hours longer per week were entirely free. When this bill was pending in the legislature, an argument used against its passage was that it would mean smaller earnings. The labor leaders, it is claimed, admitted that such would be the result, but as they believed that effect would only be temporary, they were willing to put up with it for the short time it was expected to last.¹

¹ See Message of Governor Foss, January 25, 1912.

SHORTER HOURS AND THEIR EFFECT UPON WAGES.

For a number of years Massachusetts had been leading the campaign for shorter hours for women and children. As early as 1892 hours were reduced from 60 to 58. In 1909, when an effort was made to clip off at one time four hours of the week's working time, a compromise bill was passed which fixed the number at 56, but two years later the goal set in the previous attempt was reached, six hours having been cut off in less than twenty years. When the hours were reduced from 60 to 58, and from 58 to 56, no corresponding loss of earnings was experienced, and presumably no such result was really expected in January.

The question of what effect this law would have upon wages was not passed by without discussion by some of the operatives. At least one organized body was keenly alive to the situation. At their convention held in Boston in May, 1911, the loom fixers passed a resolution notifying the employers that if the 54-hour bill became a law, they would demand the same pay for 54 as for 56 hours' work. In pursuance of that action, a committee representing that organization held a conference on this very subject in December with the agent of at least one of the largest mills, and in this same mill the operatives were told orally about the change and what its results would be. The English Branch of the Industrial Workers of the World appointed a committee on January 2 to interview the mill officials and ask what effect the change of hours would have upon earnings. As a rule, however, its full effect was not posted clearly on the bulletin boards. The mill managers generally complied literally with the law, which requires the posting of the hours of labor in manufacturing establishments, taking it for granted, as has been said by one employer, that employees "paid by the hour must have known what would be the result, and those paid by the piece or the yard could see it also; or, as expressed by another, "the people could not expect to take home 56-hour wages for 54 hours of work."

BEGINNING OF THE STRIKE.

Contrary to the general belief, the first cessation of work did not occur in the Washington Mill of the American Woolen Company, but in the Lawrence Duck Mill, where a strike began on the first of January, the day on which the new 54-hour law took effect. On the preceding Friday a committee representing the employees held a conference with the treasurer about the effect the new law would have upon their hours and wages. They were told that inasmuch as all the weavers were men, the company was willing to run the mills 56 hours per week, so that there should be no change either in the working hours or the earnings, but that if the time was reduced to 54 hours, the pay for the two hours' reduction would be lost. In other words, the company was not willing to pay 56 hours' wages for 54 hours' work. This was not satisfactory to the committee and a strike was called.

On January 9 a meeting of the employees of the Duck Mill was addressed by Joseph Bedard, afterwards secretary of the Strike Committee, and sixty-eight persons filed applications for membership in the Industrial Workers of the World. The following night a mass meeting of almost all the Italian workers of the city was held to discuss the new law and to hear reports of committees which had been appointed to interview their respective mill agents. At this meeting, the chairman of which was Angeline Rocco, the 27-year old high school student and secretary of the Italian branch of the Industrial Workers of the World, it was decided that all Italians of all the mills should strike Friday evening. They declared that wages received owing to the 54-hour law were insufficient to live on, and they "wanted" pay kept at the amount which they received under the old law. This attitude indicating the temper of the operatives was emphasized by the action, on Thursday afternoon, January 11, of the Polish weavers (chiefly women) in the Everett Mill. When their wages were paid they protested against the smaller amount received, quit their looms, and

after a demonstration to influence other employees they retired from the mill, which was shut down on Saturday and remained closed until the strike was declared off.

To take any action, the result of which would be to lessen the earnings of the unskilled workers at a time when the cost of the necessities of life was abnormally high, without discussing the question with the wage-earners, was impolitic and cost the companies dear.

DEPRESSION IN THE TEXTILE INDUSTRY.

It is true that the whole textile industry had just experienced several very unprofitable years. As the president of the National Association of Cotton Manufacturers said in his address at the April, 1912, meeting: "Few mills earned dividends; most mills which paid dividends took them from surplus accumulations of other years, and many were compelled to pass dividends entirely." A prominent cotton manufacturer of Rhode Island is on record as saying: "The year 1911 was one of almost unparalleled depression in the cotton industry in this country. Widespread curtailment and abnormally low selling prices were made to keep as much machinery as possible going. It is said that in one large center in Massachusetts the cotton manufacturing operations resulted in a loss exceeding two million dollars."

The depression under which the industries staggered was likewise hard on the employees, not because the rate of wages had been reduced but because extensive curtailment had been the rule, and this lack of employment caused the wages earned in normal years greatly to shrink during 1911. The lack of business, which was so damaging to mills and workers, has been attributed by at least one prominent treasurer to tariff agitation, to the fluctuating cost of raw materials, and to the popularity of narrow skirts, which lessened by half the cloth required for women's dresses and greatly diminished the requirements of the trade.

Notwithstanding a number of lean years in the last decade great expansion of mills occurred in Lawrence. Many thou-

sands of unskilled workers from southeastern Europe flocked to the city and were enlisted to man the machinery in these great new plants, where, because of their lack of skill, they proved of questionable cheapness to their employers, and, because of their numbers, a great incubus upon the city itself, whose officials, receiving scarcely a dollar in taxes, were obliged to furnish at great cost the privileges and advantages of city life to thirty thousand operatives.

WERE INDUCEMENTS OFFERED TO IMMIGRANTS?

It was charged and denied that these immigrants had been induced to come to Lawrence by post cards and posters, alleged to have been distributed by agents of the American Woolen Company, showing operatives in the mills carrying bags of gold on pay day into a bank opposite the mill. An official of the government was unable, after weeks of investigation, to find any basis for the charge, and President Wood, in a telegram to a New York paper, demanding a retraction of the statement, declared that the company had not "directly or indirectly sent agents through southern Europe seeking workers for their mills, nor have they caused to be distributed literature in southern Europe or elsewhere in foreign countries, nor have they directly or indirectly thus procured men or boys for work in Lawrence."

THE OUTBREAK IN THE WASHINGTON MILL.

Whether the refusal to pay the same wages for 54 hours as for 56 hours' work was due to the undoubted depression and uncertainty of the future or, as alleged by Governor Foss, was to show "the unwisdom of legislative interference," it is not necessary to decide. It was done without making plain to all the help an intention so to do. When the pay envelopes for the early days of January were opened in the Washington Mill on Friday, January 12, an uprising occurred which did not subside that day until nearly all the workers of that mill, of at least two other mills of the American Woolen Company, and of several independent mills,

were persuaded to leave their posts or were driven from their customary work places. Most of those employees who then quit work remained out of the mills from sympathy with the action or were kept at home by intimidation and violence until the strike was finally ended. Neither in January after the strike began nor in February were more than 60 per cent of all the employees on the payrolls of all the mills January 1 at work during any one week. In fact, during one week in February the percentage fell below 30 and during that month it did not rise above 42 per cent of the normal force.

From the Washington Mill the crowd, composed largely of Italians, surged toward the Wood Mill, where the pay envelopes had not been distributed, "rushed" the gates, broke open the doors, damaged the escalators, pulled girls from their work, cut off the electric drive, stopped the machines throughout the mill, and threatened to kill any person daring to put the machinery in motion, and the Wood Mill, like the Washington, was soon cleared of workers. While these ends were being secured in that section of the city, one hundred Syrians walked out of the worsted spinning department of the Arlington Mills in the other mill section; and by Friday night a working force of ten thousand, chiefly employees of the American Woolen Company, were on the streets.

Inasmuch as the strike was precipitated by a comparatively small number of employees, and as some tried to work the next morning, it was expected that many more would attempt to enter the mills Monday morning. This the strike leaders decided to prevent at all hazards, the center of attack being the four mills of the American Woolen Company, but especially the Prospect, the least affected of the four. This effort was entirely successful, the city's small available police force being powerless to help those willing to work to get into the mills, or to control the strikers and sympathizers, who assembled prior to the opening hour and choked the streets leading to the mills.

LEADER ETTOR'S PROMPT APPEARANCE.

The strike might have collapsed in a few days from lack of support and effective leadership, had not Joseph J. Ettor, one of the five members of the Executive Board of the Industrial Workers of the World, reached Lawrence Friday night, to assume charge of the unorganized masses. Prior to the outbreak there were three branches of the Industrial Workers in Lawrence, the English, the Franco-Belgian, and the Italian, affiliated in one "local." The nucleus of the English section was a remnant of the Independent Textile Weavers, a union formed after a Weavers' union of the United Textile Workers of America collapsed about 1905. The Franco-Belgian section was founded in December, 1907, and the Italians were organized by Ettor in May, 1911. The paying membership of all branches when the strike broke out has been variously placed between extreme estimates of 300 and 600.

For the work to be done in the way in which it was done, no better leader than Ettor could have been selected. Half Syrian and half Italian, though only twenty-six years of age, he has long been engaged as an agitator, organizer, and leader in outbreaks at Paterson, Brooklyn, McKee's Rocks, and others equally important and equally sanguinary. He was the magnet about whom for weeks these masses rallied, whose words were unquestioned, and whose advice was implicitly accepted. With the cunning of the Syrian and the eloquence of the Italian, this man, steeped in the literature of revolutionary socialism and anarchism, swayed the undisciplined mob as completely as any general ever controlled his disciplined troops, his boast being, "I could stop more rioting by raising my hand than the others can with their bayonets and powder." Immediately upon his arrival he began to organize these thousands of heterogeneous, heretofore unsympathetic, and jealous nationalities into a militant body of class-conscious workers. Able to make an incendiary speech either in the English or Italian language, he soon fired the strikers with a sense of the righteousness of their cause, and of the many injustices under which they supposedly suffered.

His followers firmly believed, as they were told, that success meant they were about to enter a new era of brotherhood, in which there would be no more union of trades and no more departmental distinctions, but all workers would become the real bosses in the mills. Appearing like a whirlwind, he swept through the city, stirred up the police, the city government, the militia, and even the State, and aroused amongst his followers the ardor of crusaders engaged in a holy undertaking, winning unqualified loyalty to himself and the cause he represented.

Meetings were held Saturday and Sunday, at which the fighting spirit was aroused to a high pitch, and plans were laid to organize a fight for Monday morning to prevent any employees from going to work. The occurrences of Saturday were repeated and the mills of the American Woolen Company were almost deserted. Realizing their success at these mills, the strikers moved against the Pacific mills, where the watchman was brushed aside and twenty men forced their way into the mill, intending to clear it by the methods used so successfully at the Washington, Wood, and Ayer. The twenty were held as prisoners, however, and the mill hose was turned upon the attacking force, who, retreating, soon returned, bringing chunks of ice and coal with which they attempted to break the windows of the weaving shed. Shots were fired at the hosemen by a man concealed under an umbrella. At the Arlington mills a similar effort was made. The engineer of the top mill of that corporation, under threat of death if their demand was not complied with, was compelled by strikers to stop the machinery; and after the operatives had been frightened and driven from the building, an attempt to carry the gates of the top mill was made, but ended in failure when the hosepipes were turned on the besieging forces.

This plan of campaign was devised and followed because it is the policy of the I. W. W. organization, and because the leaders knew full well that the acts of the authorities in repressing violence would fan the flames of resentment and solidify the ranks of the strikers.

This outbreak, it is generally believed, occurred before the date set for it by the leaders, May 1, the international socialistic labor day. Ettor was in Lawrence May, 1911, expounding its doctrines, and undoubtedly this local was seeking a favorable opportunity to start a strike. Elizabeth Gurley Flynn, an organizer and speaker, was in the city on several occasions, and made addresses. Upon returning to Lawrence, January 20, 1912, she said, "I have studied the conditions and we prophesied that there would be a strike when the 54-hour bill passed."

When the opportunity was presented, although in the depth of the coldest winter for years, and without funds, the leaders did not shrink from the responsibility of carrying on a strike under such adverse conditions. It was a hard time for the workers to be without work and wages. It was likewise a difficult time for the mill managers. If their samples were not ready for the usual openings, only a few months distant, much business would surely be lost for the year; and perhaps, if this business were once diverted, it might be permanently gone. Then, too, improvement in business was just noticeable, and inactivity at such a time, after a long period of curtailment, was most unwelcome and costly.

AIM OF THE INDUSTRIAL WORKERS OF THE WORLD.

The aim of the Industrial Workers of the World is to unite the workers of the nation into an industrial union—a union by which they will be able to cease working simultaneously in one, several, or all industries. Originating some sixteen years ago in France, it has been transplanted in this country, where until last January its chief activities were in the West. It has practically no financial resources: its policy being to have no funds in the treasury for the employers to dissipate. It demands abolition of the wage system and the elimination of all capitalists. Craft lines are broken down and an industrial union is organized, which cares nothing about the recognition of the union, for which trade unionists have waged some of the fiercest struggles. It refuses to enter into time contracts with employers, and

reserves the right to strike at any moment for any cause. Industrial Workers have as their motto not "a fair day's pay for a fair day's work," but "abolition of the wage system." Solidarity is emphasized. As a result of their philosophy, the unskilled and not the skilled man, as in the trade union, dominates the situation. This movement is destined to make an impression in this country, especially in the industries where the unskilled, untutored immigrant from southeastern Europe holds the field. Fraught with great significance for our industrial life, it menaces not only the industries of the country, but the regular recognized trade unions, which will experience trouble along with the industrial managers in combating the novel and effective attack of these new radicals. They declare themselves Socialists, yet protest against those who favor the parliamentary method of bringing about the peaceful revolution advocated by adherents of the red flag. They are extremists, who, chafing under legal processes, regard them as ineffective. They are in a hurry and demand direct and immediate action, holding that labor is *now* equipped to take over the management of our industrial system.

VIOLENCE AND DESTRUCTION OF CAPITALISM ADVOCATED.

The notorious William D. Haywood, the protagonist of the Industrial Workers of the World, in outlining the work set for him to do, said in a New York speech, "I am going to put the workers of this country into such a tremendous organization, a union with such enormous strength and power, that we shall be able to abolish the wage system and starve out those hell hounds of capitalists."

To bring about this result, various methods, from passive resistance to extreme violence or insurrection, are permitted and approved, the degree of violence or insurrection depending upon the counter-resistance or aggression of the enemy, the strength of the direct action organization, and other contributory causes.¹

Haywood stands for violence as a weapon of the working

¹ Solidarity, January 27, 1912.

classes, and urges upon Socialists the open declaration of an intention to organize for armed warfare. He despises the law, and believes in "coercion played on so large a scale as to be irresistible instead of sporadic as it is now."

The organization fights not only the capitalists and regular trade unionists, but Socialists who advocate the accomplishment of their purpose through the ballot. The slower way is unacceptable to them, because "the militant minority of the outlawed slaves will raise more hell with the capitalist enemy in one year, by the advocacy and use of all these means and methods forbidden by the intellectuals, than would the latter in a thousand years, with their monstrous jargon of peace and legality."¹

James Duncan, vice-president of the American Federation of Labor, declares that their program necessarily entails revolution as typified by the general strike and their country-wide class war. "They make no pretence to preserve industrial peace. Nor is the establishment of an honorable peace ever dreamt of by them. When a dispute arises, pronunciamento after pronunciamento is issued to create greater discord. The irritation strike, the passive strike, and every variety of sabotage — indifferent work, reversing cards on cars, putting packages in wrong cars — are advocated and approved. Violence is deified and is ethically justified."

While Haywood and his band of Industrial Workers of the World are denounced by many intellectuals amongst the Socialists, they are also denounced quite as severely by the DeLeon wing of the Industrial Workers of the World, who charge them with being seceders from the true Industrial Workers, raising the flag of anarchy, laying the axe to the ballot box, and advocating sabotage.

INVASION OF THE EAST PLANNED.

Holding such views and engaged in such a propaganda, it is not surprising that the leaders, after many bitter struggles in the West, should have planned to organize the illiterate

¹ *Solidarity*, January 13, 1912.

immigrants in the textile industries, and to inculcate their principles amongst them. The design of the leaders to begin a campaign in the East is revealed in an article printed in January, and evidently written before the outbreak of the strike, in which the writer said, "The battles of Homestead, Pullman, Ludlow, and McKee's Rocks compare favorably with those of Cœur d'Alene, Cripple Creek, and Goldfield." Then predicting that "the solidifying of these two forces will make the most sturdy, stubborn, and militant working classes in the world," he continued:

"The restless workers who listened to the cry, 'Go West,' and went, are now turning their faces to the East. Many workers are looking our way just now, and if those who understand cannot be depended upon to do the right thing, look out for breakers, because ignorance will not help — all together once, just to see what will happen."¹

After the preliminary agitation by Ettor, leaders — both men and women — of all grades of importance and of variegated reputations, rushed to Lawrence to assist in arousing and inciting the masses then on the streets. The strike had not progressed many days before it became evident that it was being directed by men who, inflaming the workers at the constantly recurring day and night mass meetings, were pursuing tactics unusual in industrial struggles in this Commonwealth.

Haywood, soon called to the scene of conflict, immediately began an assault upon all in authority, speaking with great frankness and bitterness at many places. Addressing the Poles, he cited them as toilers who would inherit the earth and some day be above the kings, the czars, and the bosses of the land. The Industrial Workers of the World, he predicted, would sweep everything before them, till they should cover the country and the whole world. "For a starter, the mill owners in Lawrence will have to give in." In a speech at Lynn he said:

"The wonder to me is that the Lawrence strikers have not gone into the mills and destroyed the machinery and burned

¹ Solidarity, January 13, 1912.

up the mills. I contend that the strikers have built the mills and that they have a perfect right to destroy what they have built up." And standing in Faneuil Hall he defiantly proclaimed that it was time for the government of Massachusetts to be overthrown.

At its inception trade unionists, familiar with the aims of the organization, declared the strike was an attempted revolution, led by men whose chief aim in life is to foment sedition and preach a class war. It was early recognized as an incipient rebellion by many, and was proclaimed by Ettor himself as "a war between classes." Its importance was recognized by Vincent St. John, national secretary of the Industrial Workers of the World, who in a letter to Haywood said: "A win in the Lawrence mills means the start that will only end with the downfall of the wage system."

SITUATION MORE SERIOUS THAN AT FIRST SUPPOSED.

On the afternoon of January 12, just after the flaming forth of the protest, President William M. Wood of the American Woolen Company issued a statement in which he expressed the belief that "as soon as the employees understand the real issue, and where the responsibility rests (he having placed it on the labor leaders), they will see that their action was hasty and ill-advised." "There is no cause for striking," he continued, "and when the employees find that justice is not on their side, the strike cannot possibly be long-lived. I look for an early resumption of work." This proved to be a baseless hope, and indicates that President Wood failed to realize the resources and the mettle of the band pitted against him. A few days later he declined a suggestion made by the Lawrence City Council that he confer with a committee of strikers to arrange for arbitration, taking the position that "there is nothing to discuss, much less arbitrate. There is no strike — only prevalence of mob rule."

Governor Foss soon sent his private secretary to Lawrence to investigate and report. Meeting Ettor and suggesting a settlement through the State Board of Conciliation and

Arbitration, he was informed by that leader, true to the principles of his organization, that while they were quite willing to acquaint the Board with the facts, the strikers were not looking for arbitration.

Undismayed by President Wood's declination of the City Council's invitation, the members of the City Government held a meeting in the City Hall on Sunday, January 20, at which the loom fixers, mule spinners, wool sorters, and the strikers, by their leader, Ettor, were represented. The meeting was called after the officials had interviewed the Boston mill executives, to learn whether committees from the different mills could be selected to meet the mill agents to discuss the strikers' demands, namely, 15 per cent increase of wages on a 54-hour basis, abolition of the premium system, double pay for overtime, and no discrimination against strikers, to which after the arrest of Ettor and Giovannitti was added a demand for their release.

At this meeting the skilled crafts stated that they had no grievances to justify their striking, but that they had been forced out of work. The strike committee opposed the request, and that negative recommendation was approved by the general meeting, the strikers demanding that all the mill agents meet the delegation of the whole body, "the controversy not being confined to any one mill, but being universal."

The attempt to bring about this conference having failed, a controversy was then carried on in the papers over the wages paid in Lawrence, the strikers insisting that the average wages in busy seasons, earnings of the foremen and superintendents included, were six dollars a week, and "they must be less in slack times." Because these statements were often repeated an erroneous impression was gained by the public, who accepted as true the figures given out by the Strike Committee, and by some well meaning but misinformed speakers and lecturers.

FORMULATED AND OTHER GRIEVANCES OF THE STRIKERS.

In addition to the formulated grievances, it was asserted by the strikers that the machinery was speeded up; that as a

consequence, the output was as much under the 54-hour as under the 56-hour schedule, and that their wages were reduced to increase the profits of the bosses. It was also asserted that because of the increased speed the earnings of the weavers, who had to work much faster and could not turn out as good cloth, were materially reduced by a system of fines imposed for imperfect work; and that higher wages were paid to native than to foreign help for the same kind of work.

To support this allegation of "speeding up," a witness before the House Committee on Rules testified that the speed of the machines, which he asserted was increased by the loom fixers "in order not to lose any premium during the two hours," caused so much damaged cloth that the weavers paid fines of \$1.50 and \$2.50 when certain grades were damaged, their earnings being greatly reduced in this indirect way.¹ These charges not only were not supported, but they were denied by the supervising engineer of the American Woolen Company, who testified² that the speed of the machinery was established when it was installed, and that no change was made immediately before or since the first of January. The speed of the machinery in the whole mill can be increased only in the engine room, the operative having no control over the speeding, or the movement of the bobbin in the loom. Were such a change made at the machine, it would have to be done by a difference in the size of the pulleys. After he had heard this testimony, the original witness varied his story and testified that since January 1 the "belts that run the wheels of the machinery in every room were speeded up by putting some kind of soap on it, and it was running with a much faster speed than it used to be; in fact, we could not attend to the work."³

The charge that fines were levied for inferior work in violation of the Massachusetts statute was also denied, the cashier of the Washington Mill testifying⁴ that no fines are levied, and that while cloths are graded, the same rate of pay

¹ Hearings, Committee on Rules, House of Rep., pp. 114, 115.

² Idem, pp. 447, 448, 449.

³ Idem, p. 452.

⁴ Idem, p. 432.

is given for all grades. This testimony was substantiated by the cashier of the Wood Mill,¹ who declared that there are no deductions for grading, and that the weaver gets the full rate, which is based upon the number of picks per yard, without reduction.²

Nor was there better basis for the charge that the weaver's premium was harder to earn with the reduced hours of labor, since the amount of output which entitled a weaver to the premium had been reduced in exactly the proportion of 56 to 54, so that the weaver would have the same chance under the new time schedule to earn the premium without increased effort.³

THE PREMIUM SYSTEM.

This efficiency or premium system was not in force generally in the mills in Lawrence, but only in the Kunhardt Worsted Mill, employing about one thousand hands, where the bonus was based on weekly earnings, and in the mills of the American Woolen Company, where the monthly period was in force. If, therefore, valid objection could have been made to the system—it should not have been sweepingly made against all mills in that city.

This bonus system applied to weavers, winders, dressers, loom fixers, second hands, and those engaged in certain processes in finishing. In some cases the premium was based upon output; in others it was paid for constant attendance. Where it was based upon production a certain per cent in addition to wages was paid to all who exceeded a fixed minimum, the per cent increasing as the earnings advanced from one standard sum to another, the fixed sums depending upon the kind of loom used by the weaver. If the weaver earned from \$34 to \$39.99 with a certain loom or from \$39 to \$43.49 with another, he received a 5 per cent addition to his earnings, and as the earnings grew larger the premium was advanced to 10 per cent, with 1 per cent additional for each dollar earned above the several fixed standards. The higher the percentage the more difficult it was to win the reward. The

¹ Hearings, p. 443.

² Idem, p. 447.

³ Idem, p. 447.

premium of the loom fixer was based upon the earnings of the weavers, and that of the second hand, or assistant overseer, upon the earnings of all the loom fixers under his charge. Herein lay the danger of crowding and overtaxing the weavers, because premiums of two classes above them were dependent upon their efficiency and earning power.

When the premium was based upon monthly earnings certain hardships to the operatives resulted because the rigid rules allowed only "one day out" for sickness or any cause during the four weeks. If absent the fourth week of one period and the first week of the next period both premiums were lost, and the output above the average required to earn the premium, if continued the full four weeks, would be paid for only at the regular rates. When this hardship was brought to the attention of the mill managers who used the system it was recognized as a just complaint and they promptly agreed to reduce the period to two weeks. Although organized workers are, as a rule, opposed to all bonus systems, many weavers objected to its abolition when the period in which the premium could be earned was reduced by half, because nearly 90 per cent of all the weavers profited by it and earned a premium of some size.

WAGES PAID IN THE INDUSTRY.

In all countries wherein the textile industry is prominent, it is one in which the family, — husband, wife, and children, — are engaged in earning wages, rather than the head of the family alone. Experience shows that in such industries the earnings of the entire family are no higher than those of the family head in industries where only men are employed.

At the Ayer mill, which may be considered typical of the American Woolen Company's four plants, only two rates on the 54-hour basis were less than five dollars per week — \$4.52 and \$4.92. Practically 7 per cent of the employees, chiefly bobbin and shop boys, received these wages.¹ For the week ending January 6, 1912, when the mill ran full time, the average pay, including wages of engineers, book-

¹ Hearings, p. 444.

keepers, the mechanical department and the office force of 75 or 100, was \$9.02. At the Arlington Mills none received less than five dollars a week, and at the Pacific only eighteen out of 5,200 employees got less than five dollars, four of these being learners and the others chiefly old men unable to do men's work.

Figures published by President Wood showed that in 1911, on full time schedule of 56 hours, the average wage for yarn manufacture was \$7.48, and the lowest wage in that department \$5.10, paid to minors or unskilled adults. For dressing, weaving, mending, dyeing, and picking, the usual range was from \$7.91 to \$12, the most highly-paid weavers earning from \$18.35 to \$21.36; and the dressers from \$15.66 to \$21.44. But average wage statements, which usually combine the skilled and unskilled, men and women, young and old, must be accepted with great caution, because to generalize from such figures will lead to erroneous conclusions. The average wage of \$9.02 does not help the large number who get a smaller amount. Nor can the pay envelopes showing small sums be accepted as conclusive evidence that the average wage was only six dollars a week, for it is not shown what work was performed, or that the holder of such an envelope worked a full week. Lipson, the weaver who testified before the House Committee on Rules, and who presumably was the best witness that could be produced, became so contradictory in his statements, which in turn were refuted by the Company's records, that he retired discredited and unworthy of belief. His average wage, he asserted, "is from nine to ten dollars a week," whereas the records of the Wood Worsted Mill showed that for the week after the 54-hour law took effect, he earned \$14.38, and that from November 9, 1910, to January 10, 1912, inclusive, working five per cent less than the normal working time, or slightly less than 53 hours per week, his average earnings were \$11.52.¹ They also showed that thirteen out of a possible fifteen premiums had been paid him, and yet he had the hardihood again to take the stand and say, "It is not true," stoutly insisting that

¹ Hearings, p. 437.

his average wage was, perhaps, "a few cents less than nine dollars."

A Committee on Comparative Wages, appointed by the National Association of Wool Manufacturers, recently compiled a report on wages paid in wool manufacture in this country, England, and on the Continent of Europe. This report puts the wages of twisters at \$7.50, mule spinners under the French system at \$15.75; cloth room burlers at \$7; cloth room sewers at \$10; and weavers at \$13. These figures, it was believed by the Committee, were "a fair average for the country. Some wages are higher and some lower, the figures quoted being considered an average that is as just and exact as can be established."

It is a fact, as has been said by one long familiar with the textile centers of the country, that "the entire textile life of the United States has always depended upon the low paid help, made up largely of immigrants who have begun their lives in the mills of the country, partly because they were acquainted with that sort of employment and partly because they were incompetent to take up any other line of work."¹ As immigrants of different nationalities have successively come to the country and attained new and higher standards of living, they have in turn been assailed and displaced by a new alien race, which has brought with it a lower standard, and so the battle of the standards has continued,² the mills constantly reaching down to the lower strata of society and lifting them higher.

These textile wages are based upon the full running time, and no allowance is made in the calculation for curtailment and unemployment, which were much in evidence during the preceding two years, and which greatly reduced the earnings of the operatives. Unemployment, due to illness and other causes, is a constant factor in industry, even in prosperous years. In the worsted industry it has been placed at 5 per cent, reducing by that amount the possible yearly earnings.

But low as the earnings of the unskilled operatives were, they have been able to get ahead in life's battle. This fact

¹ Hon. John N. Cole.

² Kengott's "Story of a City," p. 102.

is shown by the \$21,000,000 deposits in the savings banks of Lawrence, and the money sent each year to foreign countries, the postal money orders issued yearly from 1907 to 1911, inclusive, averaging \$125,406; but above all, by the real estate assessed to owners of the several nationalities. These are — Armenians, \$17,000; Syrians, \$222,800; Poles, \$201,000; Italians, \$801,000; French, \$1,288,000; Irish, \$10,262,500.

WAGES HIGHER IN LAWRENCE THAN IN EUROPE.

Much emphasis has been placed by those opposed to protection upon the low wages alleged to be paid in the wool manufacture in this country, and it is often accepted that the sole beneficiaries of Schedule K are the manufacturers, who have not shared its benefits with the workers. Whether or not the wages paid are as high as the industry can afford, I do not say; but if the figures of the Tariff Board are to be accepted, then the wages paid in Lawrence are higher than those paid for similar service in either Providence or Philadelphia, two other important centers of the worsted industry; and for all classes of help in the mills, the wages paid in the United States are from 43.3 per cent to 184 per cent higher than those paid in Great Britain. The tables collated by the Tariff Board¹ show in the departments requiring relatively unskilled workers that their earnings are greater than those received by many skilled workers in Great Britain, which country's wages are, in turn, higher than those paid on the Continent.

Statements from the strike leaders and letters from President Wood to his employees — he did not speak to the labor organizations or for the manufacturers, who had no organization — appeared frequently from January 16th to the 23d, during which time many interests were at work trying to find some method of settlement.

Up to January 23 the mill executives, except Mr. Wood, made no public statements. On that date, however, the agent of the Arlington Mills issued a notice in which the management, after deploring the unfortunate conditions

¹ Rep., Vol. III., p. 826.

existing in Lawrence, and expressing a belief that alleged grievances could have been adjusted by a conference with the agent, offered, if a settlement could not be reached owing to conditions, to submit all questions at issue to the State Board of Conciliation and Arbitration. From the start, Ettor opposed conferences by committees from single mills with the agent, fearing an agreement might be reached in some mills and not in others, and a break be caused in the strikers' ranks. When this offer was announced, therefore, he urged his followers not to consider it, declaring in a speech to the English-speaking employees: "We have the operators licked. They now realize it and offer to arbitrate, but we will refuse to arbitrate or compromise. We have made our demands and will not submit to any conciliation."

The State Board again appeared on the scene the next day, when one of its members assured Colonel Sweetser, in command of the militia, and Mayor Scanlon that the mill managers would attend a conference that night, January 24, with the Strike Committee. When this committee appeared at the appointed time and place, they found some of the mills unrepresented, Mayor Scanlon stating afterward that as late as 5.45 o'clock a representative of the State Board "was working the telephone trying to notify certain mill men of the meeting." Those who received no notice did not appear, but in the words of the Mayor, "How could they when they were not notified?" An attempt to do business was made, but the Strike Committee, adhering to their decision to engage in no conference unless all the mills were represented, refused to take part in any discussion, and withdrew in worse temper than when they entered the conference room.

INVESTIGATION URGED BY GOVERNOR FOSS.

The next day Governor Foss sent to the Legislature a special message in which he said, "The importance of some immediate action on the part of the Legislature is manifest by the failure of the representatives of the manufacturers to join last night in conference, after an understanding to do so

had been reached.”¹ “One purpose of the investigation,” he wrote, “should be to determine how far the advantages conferred by the national law upon the beneficiaries have been and are to-day shared with the laborers; who are supposed to be the ultimate beneficiaries.” He recommended immediate action to provide for a full investigation by a special legislative committee, or a commission to be appointed by the Governor, of the cause of the strike, with full power to summons persons with books and papers, and to ascertain all the facts bearing on the strike.

On January 25 Ettor and a committee met, in the Boston office, President Wood and officials of the American Woolen Company, but they returned to Lawrence in fighting spirit, announcing that it would be “a fight to a finish, that there would be no more parleying — all peace negotiations are off — no armistice — no truce.” Steps were immediately taken to put this threat into effect, a telegram being sent to President Heberling of the Switchmen’s Union of North America, at Buffalo, to have members refuse to handle Lawrence freight, except food for strikers, and to workmen in the New York clothing trade to show their spirit of solidarity by refusing to handle any goods made by the corporations affected. An effort was also made to organize and call out the firemen employed at the electric lighting plant and put the city in darkness.

While the two sides were putting their case before the public, members of the Legislature were introducing various orders into the General Court, providing for a searching investigation. These were referred to the Committee on Rules, who went to Lawrence to look over the ground for themselves prior to deciding whether or not to report in favor of the investigation.

LIBERTY OF SPEECH ABUSED.

During these early weeks of the strike, the city officials, only recently installed in office under the new charter, and unfamiliar with the duties of their respective positions,

¹ See Mayor Scanlon’s statement, *ante*.

lacked firmness in handling so delicate a situation. Liberty soon became license, and as disorders multiplied, passions grew, placing in jeopardy the lives of citizens and the property of the mills. All the while Ettor was diligently making fiery speeches, which worked his hearers up to a high pitch of excitement and fury, at one time declaring, "We will turn this town upside down before we get through;" at another, "We will win this strike even if they erect scaffolds on the streets;" and at another, "Remember from now on, sleep during the day and keep awake during the night. You know what that means. I plead with every man and woman not to forget there is such a thing as emery dust. If they drive you back to work, God pity the looms, yarn, and cloth. You will not hesitate to get some satisfaction out of the machinery."

As the days passed and there were accessions to the working forces, the feeling became more tense. At one of the Sunday meetings on January 28 an English member of the Strike Committee expressed the conclusion reached by his colleagues, that "There is not going to be any more scabbing after to-morrow. We will fill Essex street and Broadway full of strikers, and the scabs will not be able to get to the mills. Show Wood you mean business." A parade was announced for six o'clock the next morning, and for an hour before the time crowds gathered until the streets leading to the mills were filled and access to the mills prevented. Shortly after five o'clock, when it was still dark, an attack was made upon the street cars, during which the trolleys were pulled off the feed wire, the windows smashed with chunks of ice, the motermen and conductors driven off, and the passengers, in some cases, not allowed to leave the cars, and in others pulled from the cars and thrown into the streets. Several hours later a great crowd went to the house of the French priest, who some days previous had advised his people to go to work, called him vile names, and threatened to pull down his church and house. Singing revolutionary hymns in various languages, they "rushed" the International Paper Company's mill, in no way connected

with the textile plants, and the small Plymouth Mill of the Fibre Matting Company.

A RIOT AND A DEATH.

In the afternoon a crowd gathered in the heart of the Italian and Polish district, and when shots were fired the police were summoned. Upon their arrival an effort was made to disperse the crowd, during which a woman striker was shot and, it was charged, killed by officer Benoit, and witnesses were produced who swore they saw him do the shooting. As the revolver carried by the officer was a No. 32 caliber and undischarged, and the bullet which killed the girl was fired from a No. 38 caliber, it is quite clear some person other than the officer fired the fatal shot. One theory is that the bullet was intended for the officer; another, that the woman was shot because she had deserted and returned to work. The situation was so critical that a regiment of troops were ordered to reach Lawrence that night to reinforce the nine companies then on duty. Mass meetings were forbidden, for rioting and anarchy, in which the Italians, Syrians, and Lithuanians took the lead, had to be met.

During the strike the militia, called upon to do a most disagreeable duty, had to perform it under most trying conditions. Denounced as "uniformed drunkards" and as "reptiles with bayonets," who were "instrumental in preventing the constitutional rights of free speech, free assemblage, and holding citizens in a state of terror,"¹ they maintained order during those weeks when the feeling was extremely tense, without firing a shot. Had they been withdrawn early in the struggle, riots dangerous not only to mill property but to the city generally, would surely have resulted. Their conduct during this service was creditable alike to the officers, the men, and the Commonwealth.

AN OPEN LETTER FROM GOVERNOR FOSS.

That night Governor Foss issued an open letter, in which he asked all operatives to resume their places for thirty days,

¹ No law abiding citizen has reason to fear or resent the presence of the militia.

“pending an effort which I shall make to get differences adjusted; and in view of the fact that no notice was given to the mill operatives of a proposed reduction in wages when change of hours went into effect, I request mill operators to give 56 hours’ pay for 54 hours’ time during that period without discrimination.” He believed the differences, if carefully discussed, could be easily adjusted, and he promised to use his best efforts to bring all questions in dispute to a settlement satisfactory to all parties. This letter, which seems not to have been sent to the mill managers or the Strike Committee, was regarded as not official by the latter, who announced that the Governor had no authority to name such conditions, and were they to take favorable action on the proposal, without official invitation or assurance that the mill owners agreed to it, they would break the back-bone of the strike.

Ettor and his assistant, Giovannitti, were arrested on January 30, charged with being accessories to the murder of the woman killed the preceding afternoon, Ettor being temporarily succeeded by William Yates, of New Bedford, and later by the notorious William D. Haywood. After a lengthy preliminary hearing, they were held without bail for the action of the grand jury, there being no precedent, the justice ruling, for admitting to bail persons charged with so serious a crime. To many this arrest seemed to be an attempt to defeat the strike by depriving the strikers of a capable leader, and it was denounced as “an infernal outrage” by the Strike Committee, by all Socialists, and many others as another instance of the courts helping to crush labor. *Habeas corpus* proceedings were begun in the Supreme Court, but the petition was dismissed without prejudice because it belonged in another court. Whether the police judge was biased or not, I do not say, but as the Grand Jury sitting in Newburyport passed upon the indictments three months after the occurrence and found true bills, at least a *prima facie* case was made out.¹

To Ettor his arrest could not have caused much surprise,

¹ All delays in bringing the cases to trial have been caused by the attorneys for the defendants, the Commonwealth being ready on at least two different occasions.

for as early as January 22, in announcing Haywood's coming "in a couple of days," he said, "I had previously made arrangements that in case I was 'jugged,' he would come to take my place." He was so adroit in speech that generally, without uttering words for which he could be arrested, he produced the effect desired without overstepping the limit of free speech. The meaning conveyed to his hearers was that there must be violence to win the fight, and there was violence that 29th day of January.

A LEGISLATIVE CONCILIATION COMMITTEE.

After the Committee on Rules had unanimously reported on January 29 against an investigation "at present," the effort to get legislative action resulted in the appointment of a Conciliation Committee of three senators and five representatives whose mission it was to bring about an amicable adjustment of the controversy. The expense of keeping the militia was causing concern amongst the law makers, alarmed at the rapidly accumulating bills for which the State was responsible. This committee, though named as a conciliatory body, soon pressed the manufacturers hard to agree to meet the General Strike Committee to discuss terms of settlement, the Legislative Committee, according to Representative Sanborn, "being agreed that if mill owners repulsed them, they would notify the mill owners that the committee would stand solidly for a far-reaching investigation."

The mill managers deeming it inexpedient to begin negotiations with so unwieldy a committee as one numbering forty-eight, with many of whom no single employer had any relations, and disinclined to deal with men holding avowed anarchistic principles, were threatened by the Conciliation Committee that if they persisted in their position, the order for a drastic investigation, which they were presumed to dread, would be taken from the Speaker's table and passed. It is difficult to decide which side was wholly right, each having something in its favor. On the one hand, the State was put to great expense because of no fault on its part, and it seemed right that every expedient should be tried to end

the unhappy condition in Lawrence. On the other, it was the duty of the State to protect the property of citizens and them in their right to work unmolested and unintimidated. The feeling which the managers had against those leaders gathered from different sections of the country and more concerned for the overthrow of the wage system than the immediate interests of the operatives can be easily understood, and their disinclination to deal with them or their followers appreciated.

THE COMMITTEE'S DIFFICULT MISSION.

This committee had difficulty not only with the mill executives, but with the two labor bodies, each of which represented a certain percentage of strikers. A sub-committee tried to persuade officials of the Central Labor Union (affiliated with the American Federation of Labor) and the leaders of the Industrial Workers of the World to select representatives to confer with the mill treasurers in an effort to bring about an amicable adjustment. The difficulty of their undertaking soon became apparent, when they were told by Haywood and Yates that if the conference was held, the Industrial Workers of the World alone should represent the strikers, they standing for the real strikers, and the American Federation of Labor for the skilled crafts forced out by the strike, and it was increased when the Secretary of the Central Labor Union told them that the "skilled help would not go back just because the Industrial Workers of the World called it off."

Nor did the other sub-committee who conferred with the mill treasurers accomplish greater results. After the conference the latter issued a statement again defining their position, in which they stated that "the agents at Lawrence have and always have had authority to meet and discuss grievances with employees of the several mills. Because of the diversity of products and varying conditions, it seems impracticable to deal with the matter in any general conference until it appears that a fair effort has been made by the employees to deal separately with the several mills."

DISSENSION AMONG THE LOOM FIXERS.

After a month's struggle, the two forces were deadlocked over the way to hold conferences and with seemingly slight prospect of finding one. About this time, however, signs of disagreement amongst the four hundred English and French Canadian loom fixers, who on January 20 had voted to request their members "to come out until matters have quieted down and their grievances had received consideration," became noticeable when some began to negotiate with individual mills about terms. On February 10 that organization sanctioned the return of the men working in the Arlington Mills, they having expressed a desire so to do, and the same privilege was granted to those employed in other mills if satisfactory arrangements were made with the managers. In pursuance of this permission, those employed at the Pacific Mills voted to return to work February 12, and the Kunhardt mill men, after a conference, returned to their places February 28; but fifty-four of those employed by the American Woollen Company voted on March 1 against returning.¹

This action of the loom fixers was denounced by the Franco-Belgians, and by many loom fixers themselves, and John Golden, President of the United Textile Workers, announced that the loom fixers acted without the sanction or endorsement of either the American Federation of Labor or the United Textile Workers of America.

Early in February the United Textile Workers, affiliated with the American Federation of Labor, decided to enter the field for organization purposes, and to represent the English speaking skilled workers, who while standing for an increase of wages, were not in sympathy with the leaders of the strike or the policy of the Industrial Workers of the World. This appearance of the trade unionists was resented by the Industrial Workers of the World, who, regarding them as interlopers, denounced President John Golden as a strike

¹The loom fixers, receiving wages varying from \$13.45 to \$17.25 were a local of a small so-called national association, which in May, 1911, had voted that should the pending 54-hour bill become a law there should be no reduction of wages.

breaker, "as a party to the outrages perpetrated against the peaceful women and children in this community, and as a bitter enemy who used his efforts to prevent a peaceful settlement of this strike."

THE WEAKNESS OF ORGANIZED LABOR AT LAWRENCE.

When the strike broke out the principal organized crafts were the wool sorters, the loom fixers, and the mule spinners, the first two being independent and the latter "a hundred per cent organization," the only one affiliated with the United Textile Workers of America. This weakness was not due entirely, as has been alleged, to lack of effort on the part of the United Textile Workers to start and sustain organizations in Lawrence, for within the past fifteen years at least ten unions were organized in the city, the only survivors being the mule spinners and the two local unions which had seceded from their national organization. Rather, the weakness was due to many causes. Organizations which had been formed were weakened by dissensions in some instances until schisms occurred. In most cases they succumbed because of the quiet or open opposition of foremen and overseers—subordinates in the mills. While the mill owners are not accused of causing this opposition, they gave the unions no encouragement, simply being indifferent to their success or failure. Then, too, there was racial antagonism along with a disinclination to pay the dues required, to which the foreign element had not been educated, and the advantage of which was not easily seen in times of peace. In the face of these hindrances the task of developing an effective and stable organization with fifteen thousand non-industrial people swooping down on Lawrence between 1905 and 1910 was well-nigh impossible.

Had there been a strong textile council in Lawrence, recognized if not encouraged by the manufacturers, the strike could not have taken place in the manner in which it flamed forth. Before the new schedules took effect conferences would have been held; and had no understanding been reached the strike must have been sanctioned by a vote of

the council and approved by the national officers before it could have been legally called.

For this lack of organization part of the responsibility must perhaps be borne by the United Textile Workers, who may not have exerted themselves to the fullest extent to organize all the textile workers into affiliated unions; and partly by the manufacturers, who did not encourage, or by their subordinates opposed, the organization of regular trade unions, one of the organized conservative forces in the country at the present time.

ACTION BY THE SKILLED CRAFTS.

Notwithstanding former opposition and earlier failures, the opportunity to reëstablish itself, which the situation presented, was not to be lost by the United Textile Workers, and though their motive was questioned meetings were called prior to the action of the loom fixers, by the Lawrence Central Union to consider plans to organize and "to bring order out of chaos." The chairman of these meetings made it plain that they were neither asking any one to join an organization then nor antagonizing the Industrial Workers of the World with respect to the strike. Deploring the lack of organization among the operatives he declared their desire was "to bring about a settlement of the strike with benefit to the operatives." At a time when the tide was running strongly with the organization whose leaders were in command of the strikers, it was next to impossible to make much progress, especially among the foreign element, whose allegiance to the revolutionary body was hard to shake. But knowing well that the strength of that organization rises to its greatest height during the strike, and subsides after its close, the United Textile Workers persevered, until seven unions affiliated with them were organized on a solid basis and a textile council instituted.

After hearing the grievances of the several crafts, their chief demands, which were for a 15 per cent increase of wages, abolition of the premium system, and no overtime (details varying with the mills), were formulated, and on

February 12 letters were sent, through the officers of the Central Labor Union, to the agents of the various mills asking for conferences to discuss them. This was the course favored by the mill treasurers and opposed vigorously by the Strike Committee.

But these proceedings were retarded by the excitement caused by the detention of the children scheduled to be sent to Philadelphia on February 24. While the strike from its inception had attracted wide attention for many social and political reasons, nothing done by the authorities caused more general excitement than this action.

SENDING AWAY OF CHILDREN.

The sending away of children was a new departure in this country, it being a practice followed by continental syndicalists. It was justified by the strikers as a relief measure which would enable them longer to continue the contest, because relieved of the burden of feeding and caring for their little ones, whose sufferings in such struggles is the cause which often compels a return to work. While that was the ostensible reason, there were others which did not involve solely the creature comforts of the children. The persons who arranged for these parties were not in Lawrence or in the State, the active agents being the women Socialist clubs in New York, Philadelphia, and other cities. At a meeting of the Strike Committee on February 5, Chairman William Yates announced that arrangements had been made to send a large number of children to New York "to arouse sympathy and enlist support by parading in the streets of that city." Several days later it was also announced that "in the hope of securing a large number of children of the strikers for the purpose of holding a big demonstration in New York," three members of the New York Women's Socialist Club would reach Lawrence the next day. One hundred children had been secured, but "the leaders want at least three hundred." At a subsequent meeting it was announced that upon the delivery of sixty children at West Hoboken, a check for \$1000 would be sent to the Committee. Haywood felt that

by teaching the children the A, B, C of socialism, their cause would be helped, and Meyer London, Esq., of New York, declared at a meeting in Faneuil Hall, that "every child will carry a flood of protest and discontent throughout the land."

These statements alone are sufficient to disclose the ulterior motive concealed in this move apparently intended to promote the safety and comfort of the children; but the manner of conducting them to their temporary homes, in the coldest weather of a bitterly cold month, confirms that impression. The party previously sent to New York, numbering two hundred and ranging in age from four to fourteen years, attracted the attention and aroused the indignation of men and women truly solicitous for their real welfare. Wearing thin apparel and marshaled by well fed, well clothed Socialists, they marched across Boston and travelled for twelve hours at a time when the temperature was so low as to disorganize railroad service. Reaching New York after nightfall, they were greeted by throngs of strangers shouting revolutionary battle cries, and carried to a hall, where they were fed, displayed, and parcelled amongst their stranger hosts. Miss Mary Boyle O'Reilly, whose sympathy for the wage earner is unquestioned, in protesting against this exhibition, wrote :

"Under existing law a child cannot beg or sing in the streets. Why should scores of children be taken from school and carried from State to State to chant revolutionary songs and plead for funds on the claim that such a course is a demonstration of conditions? In this instance the plea of poverty in the homes of the strikers goes by default. The \$500 expended to carry the children to New York would have provided them with food at home for a considerable period."

It was asserted by several engaged in relief work in Lawrence that the children were sent away to be exploited by moving picture firms, a percentage of the receipts to go to the strike fund. The secretary of the Boston Society for the Prevention of Cruelty to Children said there was no justification for breaking up families and taking young children many miles from their mothers, and the superintendent of

the Lawrence schools said, "The children told their teachers that if they did not go to New York, their parents could not obtain any more relief." John Golden, President of the United Textile Workers, in the name of organized labor "disapproved" "this inhuman act," being firmly convinced "it was a diabolical scheme on the part of the officers of the Industrial Workers of the World to raise funds for the further propagation of their unholy war of class hatred and social revolution."

Some of the children sent to New York went without their parents' consent, and the parents of others, whose consent had been given, repented and later wished their children returned. Protests were sent the Boston Society for the Prevention of Cruelty to Children and to others in authority, against permitting the sending away of other parties. Some of the complaints were based upon the lack of care shown several sent to New York, two of whom were detained as lost children. An eleven-year-old girl, asked by a woman at the Lawrence railroad station if she wished to go to New York, accepted the invitation without the knowledge of her parents and was taken with the party. She was found with a Polish woman and her father was compelled to go to New York and fetch her home at considerable expense, reimbursement being refused by the committee of the Industrial Workers of the World. Two Italian youngsters, aged six and eleven years, children of a grocer able to care for them, were found on the Lawrence streets by the committee and sent with the party to Barre, Vt.

REASON FOR INTERVENTION BY AUTHORITIES.

To prevent such occurrences in the future Colonel Sweetser notified Chairman Yates of the Strike Committee under date of February 17, that he "would not permit the sending off of little children away from their parents unless he was satisfied it was done with the consent of the parents," and Assistant City Marshal John J. Sullivan¹ announced through

¹ Hearings, pp. 299, 300.

the newspapers that no more children would be allowed to leave Lawrence until the police were satisfied that they were going with the knowledge and consent of their parents; that he would ask the parents if they knew where these children were going, whether they would be properly cared for, and whether proper provision had been made for their return. That was regarded by the Strike Committee and the leaders as a challenge, and notice was served through the papers that notwithstanding the marshal's attitude the children were going regardless of the parents or anybody, and no information would be given to any person. On the morning in question the marshal went to the railroad station and assured the women that if they were sending their children away because they needed assistance and feared they could not get it, they were mistaken; that the City and State were willing and ready to care for the children and furnish all food, medicine, and clothing needed. All willing to accept his invitation were asked to go to the City Hall where they would be taken care of.¹ After all but some twenty had withdrawn from the room he asked if those remaining were the parents or guardians of the children, and whether they had the right to take the children out of Lawrence. He wished to be informed whether these adults with the children knew where they were going and what provision had been made for the children's safe return. No word in response to this request was spoken by any one, and within a few minutes the attempt was made to put the children on board the car. This was prevented by the police, and the party, after resistance, was taken to the police station in an auto truck.

INVESTIGATIONS AND THEIR RESULT.

This action was denounced as unwarranted interference with the constitutional rights of parents and as an interference with interstate commerce. The Attorney General of Massachusetts was directed by Governor Foss to investigate and report upon the legality of this action; another inquiry was undertaken by United States District Attorney French act-

¹ Hearings, pp. 185, 186.

ing on orders from the Attorney General of the United States, and the United States Senate ordered an investigation of the condition of the mill workers to be made by the Department of Labor under the direction of Commissioner Neill. The occurrence was threshed out at the hearing before the House Committee on Rules, where some witnesses testified that they saw the police take little children, pick them up by the leg, and "throw them in the patrol wagon like old rags," choke a mother into insensibility, and "beat women across their breasts, abdomen, and shoulders," although those with the children made no resistance except vocal protest against the action which prevented their departure for Philadelphia.

But these allegations were stoutly denied by Marshal Sullivan, who testified that "no person was clubbed, beaten, or abused — neither man, woman or child — at that depot. There was not a drop of blood spilled by anybody." When Marshal Sullivan was asked at the conclusion of his statement, by Representative Berger, how he harmonized the statement of the Philadelphia Committee with his testimony, he replied that the committee had heard the witnesses and it was for them to judge who was telling the truth.¹

At the end of a week given to the hearings the participants went their way; and as indicating the impression created by those who testified, it is sufficient to say that Mr. Berger, who, when resting his case, asked for an hour in which to close, neglected to exercise his right, and the resolution calling for a sweeping investigation "of the relations of the American Woolen Company and its thirty thousand operatives in Lawrence" was not pressed for passage.

So much excitement was created by this action, which was attributed to the influence of the manufacturers with the city authorities and police, that they were moved to announce in a statement that "The manufacturers of Lawrence are in no way responsible for any detention of children who were being sent out of the State. The manufacturers did not ask for this; they were not consulted about it; they were not informed of the contemplated action of the local authori-

¹ Hearings, p. 345.

ties." Nor was any effort made at the congressional hearing to show that the manufacturers were responsible for this action, which, instead of helping them, had the reverse effect, and it is difficult to believe that they could have devised or counseled so foolish a course.

As no final replies to the Central Labor Union letters had been received by noon of February 29, rumors spread of their purpose to begin a general strike, which meant the calling out of those at work, the number then in some mills being two-thirds of their normal force. The foundation for this rumor was a statement issued from the headquarters of the United Textile Workers which indicated that unless the agents of the mills made concessions the skilled operatives, some of whom were working in the mills, would be called out on strike.

WAGE INCREASE ANNOUNCED.

During February strenuous efforts to bring about an end of hostilities were made by many interests in Boston, and several times these were about to succeed when some untoward event in Lawrence seemed to make the time inopportune to grant any concession. It is believed by many that the mill executives reached the conclusion soon after the outbreak that an increase of wages was inevitable. So long, however, as active rioting continued, it was considered inexpedient to adopt that course. But when two-thirds of the Arlington's employees, eighty per cent of whom were English, Irish, Scotch, or Canadians — natives of English-speaking countries — were at work, that corporation took the step which, it was well understood, would mean an equal, if not greater, advance in all the textile mills of New England and perhaps of the country. The afternoon papers of February 29 contained rumors of an advance, which were confirmed by the appearance in the next morning's papers of a notice by the Arlington Mills, copies of which must have been sent to the papers Friday morning for release that night, announcing that "A readjustment of wages will be made upon a comparative basis as to occupa-

tions involving increases in the rates now paid by the hour and by the piece. Such advances are to be equitably adjusted according to the classes of workers and their earnings, and in no case to be less than five per cent. The new schedule of wages will go into effect Monday, March 4, 1912.”¹ This was posted at the mills that morning, and proved to be an example which was speedily followed by the American Woolen Company and the Pacific Mills. On the following day, the Atlantic, Lawrence Duck, and Kunhardt Mills granted similar concessions.

For weeks the mill executives had been subjected to great pressure from two sides: on the one hand, not only from manufacturers all over Massachusetts who were not eager to meet an increase in wages, but also from those in adjacent states, in some of which are great mills employing many operatives whose interests were bound up in the settlement of this strike; and on the other, from many persons, a few of whom were stockholders, convinced that the lowest paid men should be given a wage sufficient to enable them to live in a way more nearly approaching the American standard, who were urging an increased wage. This pressure was extremely strong against an increase, and to decide to grant it, and to be leaders in making the announcement, required a degree of courage not appreciated by those unacquainted with the situation.

The wording of several announcements, some of which were prepared in evident haste, was not as explicit and as free from uncertainty as could have been desired, but soon after their posting it was made known by interviews and statements that the largest increases would be given to those receiving the lowest wages, in some cases the advances rising to 11 per cent and averaging 7 or 8 per cent. The lowest increase, of 5 per cent, would apply to the highest paid, skilled workers, and time would be required to work out the details.

¹ Orders had greatly increased during the strike, and though conditions were still unsettled the trade outlook was distinctly improved.

A CAMPAIGN OF MISREPRESENTATION.

Then began a great campaign of misrepresentation of what the announcement really meant, some of the newspapers and the Strike Committee referring to it as a "5 per cent increase," many strikers believing that the increase really amounted to only $1\frac{1}{2}$ per cent on the 54-hour schedule.

Although a large number of foreigners were satisfied with the terms announced, and would have been glad to return to work, it was reported at the Strike Committee meeting that their people were opposed to accepting the offer, and it was voted to "reject the 5 per cent increase offered, because it was indefinite," to stand for their original demands, and to insist that Ettor and Giovannitti, the leaders, should be released before the strikers would return to work.

At a meeting of the Executive Committee of the Central Labor Union, on Friday night, the announcements met with a no more friendly reception, the Committee refusing to accept the offer and claiming that better terms should have been given by the American Woolen Company, because conditions were better in the wool than in the cotton manufacture. At a meeting of the Strike Committee March 2, it was asserted that "We will win," "The interests are yielding," "Taft is taking action," and "Governor Foss is weakening."

With the offers rejected by the Strike Committee and by the Executive Committee of the Central Labor Union, the prospect for a settlement did not seem promising, but doubt was dispelled when the rank and file of the skilled operatives, many of whom had been enrolled as members of the United Textile Workers of America, reversing the action of the Executive Committee of the Central Labor Union, voted Monday evening, March 4, to return to work "on the same conditions as other crafts went in. That is, they would return on condition that the mill owners give 5 per cent increase on a 54-hour basis and adjust their grievances at the earliest opportunity." The Industrial Workers of the World leaders immediately claimed that a smaller number of operatives would be at work on Monday than formerly, that the

concessions were an evidence that the employers were weakening, and that if they held together they would get a greater advance than that offered.

At this juncture the Legislative Conciliation Committee, which had been holding daily sessions with the representatives of the American Woolen Company, again requested the Strike Committee to meet officials of the company and confer over the meaning of the offer. The next day a committee met President Wood and after a conference they returned to Lawrence "without getting a clear idea of the full significance of the proposed 5 per cent increase," although the officials explained that the 5 per cent was only a minimum, their "intention under the schedule to be adopted being to make the increase average 7 or 8 per cent, the greatest increase going to the lowest paid, the details of which would be worked out in two weeks."

OPPOSITION TO A SETTLEMENT.

For days these conferences were continued on the pretence that they were needed to clear up a misconception on the part of the operatives of the real meaning of the offer. There was good reason for this attitude, inasmuch as each day's delay in reaching an agreement meant hundreds of dollars to the strikers' treasury, the work of financing in mid-winter a strike involving so many thousands being as efficiently done as that entrusted to Ettor and his successors. The strike was not many days old when a stirring appeal, falsifying the real situation at Lawrence and intended to arouse not only the sympathy and secure the support of the trade unions (whose bitter and relentless enemy the Industrial Workers of the World are), but of the public generally, was widely distributed. Others of a similar character followed in quick succession, the last one being issued March 21, eight days after the concessions were accepted by the Strike Committee. One typical of all, printed in red and black, carried a fake illustration showing soldiers halting a crowd with "charge bayonets," and a blood curdling caption.

But nothing was of greater assistance than the action taken by the National Executive Committee of the Socialist party which, at the solicitation of Haywood, passed a resolution at their February meeting, directing each one of the fifty-five hundred socialist locals in the country to raise funds for the strike, and to voice a protest that would bring supplies from other quarters. The purpose of the leaders was to gather cash not so much for relief use as for themselves and propaganda work, which was easy so long as the struggle was continued. Money flowed into the treasury in amounts so large as finally to cause questions to be asked concerning the accounting methods used, in view of the comparatively small sums spent for actual relief work and support of the soup kitchens which had been opened. Men who had contributed to the fund because they wished to relieve women and children in distress, and not to pay for delicacies for Ettor while in jail, nor for the salaries of certain officials and agitators, nor the expenses of sending children to cities for exploitation purposes, called so insistently for a statement and the privilege of examining the books that finally the Strike Committee on February 24 promised that "An itemized statement of receipts and expenditures will be sent to all donators," the reason given for refusal to make public an earlier financial statement being "fear of an injunction to restrain them from using the funds for giving relief to the needy strikers." This promise was never kept and was never intended to be kept, and it was necessary to get the Attorney General, in the name of three contributors, to file a bill in equity asking for an accounting, the purpose being to have the question, whether committees appealing to the public for contributions may use the money for purposes other than those set forth in the appeal, answered authoritatively by the Courts. To this bill the respondents demurred on the ground that the appeal for funds was not for the sole support of the strikers and their families who might be suffering and in want, but for "a general strike purpose."

STRIKE CONTRIBUTIONS DISAPPEARED.

An examination of the books, which were kept in a very haphazard manner up to February 12, showed that at least \$62,564 had been received up to March 16. The bank account showed that but \$46,188 had been deposited to the credit not of the Strike Committee but of the Industrial Workers of the World, leaving the large balance of \$16,376 unaccounted for. It was also disclosed that the sum of \$10,800 had been transferred from the Lawrence Trust Company to a bank in New York City, from which it was later distributed, all of which confirms the suspicion that the strike was prolonged not so much for the larger wages secured for the striking operatives, as for the private gain of the leaders and promoters of the strike.

After each conference with the legislative committee and the officials of the American Woolen Company, it was announced that an additional concession had been yielded by the company, and by continuing them longer the original demands would finally be secured. After many conferences and the submission of schedules as they were worked out, it was announced March 9 by Chairman Ellis of the Conciliation Committee that those who go back will work 54 hours a week and receive a wage on the average $3\frac{2}{3}$ per cent higher than on the 56-hour basis. This is the result of working out the guaranty of the American Woolen Company that the increase will be not less than 5 per cent and the average at least 7 per cent over the 54-hour schedule. In other words, the result of all the conferences and the delay from March 1 to March 9 was simply the translation into dollars and cents of the offer originally made.

A CAMPAIGN OF VIOLENCE TO PREVENT RESUMPTION
OF WORK.

While these conferences were continuing, the Industrial Workers of the World leaders made a determined effort, by violence and intimidation of various sorts, to prevent those wishing to resume work from reaching the mills. The end-

less chain system of picketing was put into force, and women in delicate condition who did not work in the mills, along with "strong arm" men, were quite generally pressed into service. Women were assaulted by men, and pepper was thrown in the eyes of operatives and police officers. Early in the morning, powerful men followed, threatened, and seized girls on their way to the mills, twisting their wrists, snatching their luncheons, and terrorizing them generally. During the night strangers visited the homes of the workers and threatened to cut their throats if they persisted in going to work, and the sheds and barns of a special police officer, whose house had been bombarded with rocks some weeks earlier, and badly damaged, were set on fire and burned.

MILLS RESUME WORK ON NORMAL BASIS.

But as the days passed it was increasingly difficult for the Strike Committee to hold their forces intact, signs of restlessness and dissatisfaction on the part of certain nationalities appearing at different times. To keep them in line, a proclamation was issued March 8, imploring the workers to "remain from work until the strike is settled;" but on March 13, at an executive session, the Strike Committee endorsed "the concessions granted by the American Woolen Company," that action being ratified later at a mass meeting. The next day the ban was lifted from the Atlantic and Kunhardt Mills; but because the Arlington, the International Paper Mill, the Lawrence Duck, the Everett, the Pacific, and the United States Worsted Company¹ declined to furnish to the Strike Committee detailed schedules, showing the increases and the new rates, the strike against them was continued, the work of the Strike Committee not being finished, according to leader Yates, "until it had brought every mill owner to his knees."

Notwithstanding this adverse action of the Committee, the operatives, weary of idleness, flocked back to all the mills on the 15th, dissatisfaction appearing because some operatives

¹ The officials of these mills had no dealings with the I. W. W. committee at any time during the strike.

were permitted to return to work while others were forbidden to do so by the failure to declare the strike off against the mills mentioned, the understanding having been that all would go back together.

The strike, which had stirred the country for nine weeks, whose toll was two deaths, a loss exceeding a million dollars alike to mill owners and mill workers, and an expense to the city of \$75,000 for extra police and to the State of \$180,000 for the services of the militia, was ended and the wheels of industry, though creaking, were again in motion.

From the beginning of the struggle the strikers, deceiving themselves, believed that every man's hand was against them. On the contrary, the citizens of Lawrence and people the country over sympathized with their desire for higher wages, but that sympathy was largely forfeited by the violence practised, the class war so defiantly proclaimed, the acrid denunciation of trade unions and labor leaders long respected throughout New England, and the intimidation used to force from the mills those who, though approving the demand for increased pay, disapproved the plan of campaign adopted and the leaders selected.

LESSONS OF THE STRIKE.

Out of this bitter experience lessons of value should be learned by employees, citizens generally, and the employers. The operative must be taught the advantages to be gained by upholding, not destroying trade unions, and the folly of accepting leaders more concerned for the overthrow of the social structure than for the present good of their followers, who were aroused to attempt that impossible task at the present time in one community.

The public, too, must take heed that the gates admitting these foreign millions to the privileges of the land are more closely guarded, for with more carefully selected immigrants there would have been no Lawrence upheaval, and there would have been "much less social unrest and much less extreme radicalism imported from Europe."

The employers should learn that it pays to deal with their employees with frankness and absolute justice, and that it is unwise to withhold information for fear trouble may happen, such action bringing about, in nine cases out of ten, precisely the situation sought to be avoided.

They should clearly understand the value (to them) of an organization of their employees, officered by local men of ability and fairness, and led by national officers of stability and character. Thus banded together and thus led, they will make the greatest bulwark against similar outbreaks in the days to come. Safety for employers, employees, and the public alike lies in organization under sane and reasonable leaders, rather than in the unorganized, undisciplined, and easily inflamed masses.

The too-often despised and little understood leaders of trades unions are as a rule far more conservative than the mass of their followers. They do not urge organized labor on, as is usually though erroneously supposed, but they are constantly trying to hold it back. The way to prevent the demagogue from getting control of the labor movement is not to attempt to thwart organization and refuse to confer with local or national officers, but to deal with these officers and encourage these regular organizations. This danger, — the ascendancy of the demagogue and the radical, — which is more imminent now than ever before, cannot be averted by any attempt to crush the unions. On the contrary, that attitude will surely increase the perils now threatening industry and the nation. Employers should recognize the fact that labor organizations are with us and will remain with us; and those who seek to do justice and at the same time wish to promote the interests of industry, should attempt to work through the unions and develop everything that is good in them; for it should be remembered, as Professor Richard T. Ely has said "that every employer and indeed every man of wealth and position on the side of the working-man is a conservative element in society."¹

And if the general public but knew the anarchy which

¹ The Labor Movement in America, pp. 162 and 322.

would follow the suppression of labor organizations, they would thank God for their existence; for as a recent Commissioner of Labor in New York has said, "You may like the labor unions or not, but the time is coming when you will be grateful to them as the only thing that stands between you and anarchy."

If these lessons can be driven home upon all three parties concerned in our industrial life, the loss and sufferings caused by the Lawrence outbreak will not have been in vain.

JOHN BRUCE McPHERSON.

WOOL INVESTIGATIONS AT THE BUREAU OF STANDARDS.

VERY soon after the establishment of the Federal Bureau of Standards in Washington numerous requests for information in reference to textile standards and the properties of textile fibers began to be received.

Representative organizations and individuals engaged in the textile industries urged the desirability of a comprehensive investigation of important questions and the development of uniform methods of testing. The government departments sought assistance in the preparation of specifications for their purchases of textiles and the systematic testing of deliveries.

A careful survey of the conditions in this country and in Europe revealed the fact that there existed a real need for standardization which required the assistance of the government especially if it was to become international. It was therefore decided to include in the Bureau organization a textile section and to equip laboratories especially for textile work. Preparations for the work have been progressing steadily for several years and a considerable amount of preliminary information has been secured; the laboratories are now equipped to undertake practically every type of textile test and many kinds of investigations.

For the determination of the shrinkage of raw wool an experimental scouring plant has been installed. It consists of a set of three bowls, a steam-heated soap boiler, a centrifugal wringer, a preliminary drying oven, ventilated and steam-heated, and conditioning ovens. The scouring bowls are fitted with motor driven press rolls and are piped with hot and cold water and soap solution in such a manner as to control the temperature and concentration of the scouring liquor. Conditioning ovens of the electrically heated Danto-Rogeat and the gas heated Corti system are a part of the equipment. For the testing and analysis of yarns and fabrics the laboratories are supplied with yarn reels, twist counters,

tensile strength testers, count glasses, yarn balances, and microscopes.

For the purposes of identification and classification there is also available a collection of textile fibers in different stages of preparation.

The room in which the physical tests are conducted is fitted with a temperature and humidity control and it is possible to conduct investigations under constant conditions regardless of the season or condition of the atmosphere.

A preliminary study of the effects of moisture content upon the physical properties of single and two-ply cotton yarns over the range of sizes from No. 14 to No. 100 has been completed and the report is in press. A similar study upon worsted and woolen yarns is anticipated for the current year.

SAMPLE SCOURING.

The work thus far undertaken upon sample scouring has consisted principally in a comparison of different scouring liquors upon wools of different shrinkage, a determination of the accuracy with which results upon the different samples from the same lot can be repeated, and a comparison of the results obtained by sample scouring, with those obtained by mill scouring and those estimated by wool experts. From the results thus far obtained it appears that the scouring process can, by careful manipulation be so controlled as to give concordant and thoroughly reliable results. It is believed that a standard laboratory method of sample scouring can be developed. Of course it is realized that to be of extensive use such a method requires a satisfactory method of sampling. Through the generous coöperation of some members of the National Association of Wool Manufacturers the Bureau has begun comparisons of different methods of sampling and the results thus far are very encouraging. The plan involves the selection of five and ten pound samples from the lots as they are received at the mills, the number of samples from each lot depending upon the number of bales in the lot. A record will be kept of the lots as they pass through the mills and the selected samples will be scoured in

the laboratory. In both cases the remnant grease will be determined.

In this manner the reliability of the sample scouring may be determined. It is hoped during this year to handle several hundred lots in this way.

In the trade much dependence is placed upon the ability of the wool expert to estimate the shrinkage.

As a means of gaining some information regarding the agreement which would exist between the estimates of different experts upon the same samples, also the accuracy with which the estimates can be made, four samples were selected representing a range of shrinkage from 45 per cent to 70 per cent. These samples were submitted to ten expert wool men in Philadelphia, Boston, and New York, representing large firms.

A summary of the results follows :

Kind of Wool.	Average Estimated Shrinkage of Ten Experts.	Actual Shrinkage, Bureau of Standards.	Error of Average.	Greatest Individual Error.
§ Territory.....	70.6%	71.2%	— 0.6%	7.4%
New South Wales	56.9%	61.0%	— 4.1%	5.9%
Australian 80's	55.1%	48.5%	+ 6.6%	5.1%
Australian 70's	50.8%	45.6%	+ 5.2%	6.1%

+ indicates estimate too high.

— indicates estimate too low.

Individual estimates were oftentimes very nearly correct.

Before forming an opinion it would, however, be well to extend this test to a wider range of wools and a larger number of estimators.

A STUDY OF REGAIN.

Much has been written recently regarding conditioning and the establishment of a standard regain. In order to call attention to the variation in regain of different wools and the necessity of extending investigations of this nature to a wide

range of samples, the regain of 11 wool tops between a humidity of 45 per cent and 85 per cent is submitted in the following table :

INFLUENCE OF HUMIDITY UPON WOOL TOP.

The following regains were determined at different times and by employing eleven different kinds of commercial wool tops containing percentages of oil varying from 0.42 to 4.03 upon the weight of the sample :

Kind of Wool.	Per Cent Regain at Relative Humidity of :					
	45%	55%	65%	75%	80%	85%
1 Territory	14.26	15.06	15.14	15.77	.....	17.37
2 Territory .....	.....	14.78	15.52	16.10	16.88	
3 Territory .....	.....	14.58	15.36	16.00	17.34	
Australian 70's	14.36	14.88	15.59	16.95		
Australian 70's .....	.....	13.77	14.40	15.75		
Northern California.....	13.22	14.41	15.49	16.47	.....	19.28
Fine Ohio and Montana	13.17	14.41	15.36	16.49	.....	19.24
Lincoln Hogs	13.59	14.62	15.71	16.71	.....	19.02
2 Blood.....	14.04	15.10	16.27	17.55	.....	20.10
4 Blood.....	12.75	13.63	14.77	15.91	.....	18.56
4 Blood.....	13.26	14.36	15.46	16.48	.....	18.90
Average	13.33	14.51	15.37	16.38	17.11	18.92

It is interesting to note that at a relative humidity of 65 per cent, usually taken as standard, the regain varied from 14.40 per cent for Australian 70's to 16.27 per cent for $\frac{3}{4}$ blood — a total range of nearly 2 per cent — and that between the two lots of Australian 70's there was a difference of nearly 1 per cent. These preliminary results show the desirability of extending the study of regain to a wide range of wools, not only for one season but for several seasons, and a careful investigation of the causes which lead to the differences before a fixed standard of regain should be adopted. The Bureau of Standards hopes to extend this work and that pertaining to the establishment of other textile standards and to place in the hands of those interested in the textile industries information which will be of value to them. The work will progress as rapidly as the means available will permit. The willing coöperation of those who

have become interested has already rendered valuable assistance and it is only by this means that the best results can be obtained.

The facilities of the Bureau are available to any who wish to obtain information upon questions of standards or for the making of tests for which no commercial laboratories are equipped or for which the results obtained by the Bureau are especially desired. It is not the intention to enter extensively into the field of sample scouring or conditioning, but a limited amount of work of this nature can be undertaken where in so doing information of value to manufacturers and dealers will be obtained. The laboratories of the Bureau are open to the inspection of interested visitors and the methods and apparatus developed will be willingly explained to those desiring information.

D. E. DOUTY.

Editorial and Industrial Miscellany.

A CLEAR-CUT ECONOMIC ISSUE.

PROTECTION *vs.* FREE TRADE SQUARELY PRESENTED BY PLATFORMS AND CANDIDATES IN THE NATIONAL CAMPAIGN.

AMERICAN wool manufacturers will find the doctrine of tariff for revenue only, as far as possible removed from all thought of protection, presented with precision and emphasis in the Baltimore platform on which Dr. Woodrow Wilson is nominated for the Presidency of the United States. This is as it should be, for Dr. Wilson is a life-long free trader who is not afraid to say that he is a free trader and irreconcilably opposed to all national protection for the encouragement of any national industry.

This Bulletin is not a partisan publication, nor have party politics any place in the purposes of the National Association of Wool Manufacturers. There are as there always have been both Democrats and Republicans in the membership of this body, and there is no disposition to think any better or any worse of any man because of his political affiliations. To this Association the quadrennial national campaign is not a mere contest between two distinguished candidates or two great armies of American citizens, but rather between two wide apart economic principles that happen to be defined with unusual clearness this year in the declarations of the rival and contending forces.

This exactness of statement is altogether fortunate. It is well that the choice of the American people should be determined by something more than a mere matter of habit or prejudice or sordid and unprofitable personalities. The main issue this year is broad and dignified and altogether adequate. Over this issue of tariff for revenue only *vs.* tariff for revenue and protection men have differed in this country ever since the nullification movement of 1832, and doubtless will continue to differ so long as supposed differences of interest divide the various sections of a wide republic.

One platform proclaims a continuance of the protective tariff policy, with all rates of duty now deemed excessive reformed

and reduced. The other goes to the frank extreme of an economic policy in which protection shall not be considered. The Baltimore deliverance in its first and most salient paragraph says:

We declare it to be a fundamental principle of the Democratic party that the Federal government under the Constitution has no right or power to impose or collect tariff duties except for the purpose of revenue, and we demand that the collection of such taxes shall be limited to the necessities of government honestly and economically administered.

This is a frank harking back to the doctrine of those South Carolinians who in 1832 undertook — unsuccessfully — to nullify at Charleston the tariff laws of the United States on the express ground that protection to Northern manufacturing industry was unconstitutional. Old Andrew Jackson, who was then President, did not agree with this opinion, but suppressed the incipient rebellion and enforced the law. He settled the question, however, only for the time being. Almost thirty years later when the South seceded, the founders of the Confederacy wrote into their constitution a specific proviso that "The Congress shall have the power to levy and collect taxes, duties, imposts and excises for revenue necessary to pay the debts, provide for the common defence, and carry on the government of the Confederate States, but no bounties shall be granted from the Treasury nor shall any duties or taxes on importations from foreign nations be laid to promote or foster any branch of industry."

After a lapse of many years this explicit ancient doctrine of 1832 and 1861 appears again in the declaration of the Baltimore platform of 1912, that "the Federal government under the Constitution has no right or power to impose or collect tariff duties except for the purpose of revenue," and the appeal to the American people "to support us in our demand for a tariff for revenue only."

On this platform, as is perfectly fit, there has been nominated a cultivated and earnest man of Southern birth, who unequivocally accepts the declaration that all protection is wrong in principle and unlawful in practice, and that the economic policy of the United States must be changed as rapidly as possible to the basis of tariff for revenue only, which finds its chief and indeed now its only exemplification among civilized nations in the fiscal

system which the United Kingdom has practised on the land — but significantly not on the sea — since 1849.

Many years ago one of the witnesses before the United States Tariff Board of 1882, on which the distinguished first Secretary of this Association, Dr. John L. Hayes, served as member and President, was a young Southern scholar and leader, Dr. Woodrow Wilson, of Atlanta, Ga. Dr. Wilson said :

It is not my purpose to represent or advocate any particular interest, but only to say a few words upon the general issues before you on the subject of protection or free trade. This question of the tariff is one which has been under consideration in Congress for ninety odd years. Early in the century protection was introduced for the purpose of fostering new manufacture in this country. That system was continued down to the time of the war; but since the war it has been upheld professedly for the purpose of raising revenue, and to enable the government to recover from the indebtedness caused by the war. Free trade, therefore, has been a slumbering question, but it will soon become one of the leading questions in all political discussions, because, now that peace has come, the people of the South will insist upon having the fruits of peace, and not being kept down under the burdens of war.

Dr. Wilson proceeded to define with accuracy and fairness what he and those who agreed with him demanded in the name of free trade. "No man with his senses about him," he says, "would recommend perfect freedom of trade in the sense that there should be no duties whatever laid on imports. The only thing that free traders contend for is that there shall be only so much duty laid as will be necessary to defray the expenses of the government, reduce the public debt, and leave a small surplus for accumulation." Dr. Wilson stumbled in an assertion that there was no duty on, but free trade in, wheat, and was corrected by Commissioner Oliver, who pointed out that "wheat pays 20 cents a bushel." In conclusion, the witness denounced the protective tariff policy as "not only a pernicious system, but a corrupt system."

Now, thirty years after, Dr. Wilson is a candidate for the Presidency on a platform embodying the doctrine of the nullification convention, the Confederate Constitution, and his testimony before the Tariff Board of 1882. His definition of free trade not as a sweeping away of all custom houses, but as a

tariff for revenue only is historically and scientifically accurate. He would not deny that he is a free trader now, and on that he is frank to join issue with the protectionists. Dr. Wilson is the first Presidential candidate since the Civil War willing so to avow himself.

Undoubtedly if elected he would go farther and faster to tear down all tariff protection than Chairman Underwood. If the wool and woollen bill of the present Congress were to be changed in any way under the influence of Dr. Wilson if he were to be our Chief Executive, it would be to make it still more extreme. The manufacturers of the United States need not labor under the slightest illusion as to what they may expect if Dr. Wilson and his friends supporting the Baltimore platform should carry the national elections and secure control of both the Senate and the House of Representatives.

ANOTHER FUTILE ATTACK IN CONGRESS.

THE REVIVED UNDERWOOD-LA FOLLETTE BILL AND ITS UNDOING BY THE EXECUTIVE.

ONCE again has the wool and woollen industry of America successfully run the gauntlet of political attack in the form of crude, sectional legislation framed half in ignorance and half in hate, that if enacted would have meant disaster to millions of people in the United States for the profit of Europe. So firm a confidence was felt in the American President and the American Senate that at no time throughout this renewed and futile onslaught was the wool or woollen business of the country seriously disturbed. It is, of course, recognized that the political foes of the industry may finally prevail and that the very prospect of this may shiver prosperity, but not until next year can they have an opportunity actually to turn over the American market to the exploitation of foreign manufacturers.

Meanwhile there should be some months of reasonable activity on this side of the Atlantic. President Taft's veto of the hybrid Underwood-La Follette bill was just what might have been anticipated of a protectionist Executive, but it is to be regretted that timorous advisers persuaded him to give even an implied approval to the hastily-written substitute bill of the minority of the Ways and Means Committee of the House of Representatives. This

measure, with its ill-arranged rates and particularly its insistence on the impracticable "wool content" basis of compensatory duties, would have had as sinister a result upon the industry as the Underwood-La Follette bill itself. That House bill ought promptly to be laid away in the political lumber room and forgotten by all responsible for its existence. The only possible pretext for it was a consideration of party strategy that will have forever vanished before the next brief and final session of the present Congress.

Aside from this incidental allusion to the unfortunate House bill, the President's message is a vigorous statement of the protectionist cause, entirely consistent with his message of a year ago in which he based his veto not only on the fact that the Tariff Board had not yet made its report, but equally on the fact that the Underwood-La Follette rates of duty were manifestly insufficient to save American wool growing and manufacturing from a grave catastrophe. In his second message Mr. Taft effectively cites the Tariff Board report as justifying his original position. "Most of the rates in the submitted bill," declares the President, "are so low in themselves that if enacted into law the inevitable result would be irretrievable injury to the wool-growing industry, the enforced idleness of much of our wool-combing and spinning machinery and of thousands of looms, and the consequent throwing out of employment of thousands of workmen. In view of these facts, in view of the platform upon which I was elected, in view of my promise to follow and maintain the protective policy, no course is open to me but to withhold my approval from this bill."

These are plain, brave words which might have come from William McKinley. Republican leaders in the past two or three years have sometimes seemed to be paltering with protection, but as the day of the great national election draws near they cannot but recognize more and more clearly that the protective principle in its large, broad sense is the fundamental principle of their party, its greatest and most valuable asset, and that to adhere to it and emphasize it is a matter not only of personal and party honor but in the long run of political advantage.

They may be beaten on the protection issue in November, but without the protection issue their defeat would be not a Bull Run but a Waterloo. The Republican party needs the protective idea a great deal more than the protective idea needs the Repub-

lican party. It is the growth of the national spirit as well as the spread of education that has given the protective policy its tremendous strength in the United States. Just now it happens that the national spirit is weak — weaker than it has been at any time since the Civil War. The country is plagued by class and sectional strife and the narrow ambitions of selfish, headstrong factional leaders, but this is a passing phase and not a permanent condition. It is comparable with the discontent and discord of 1890-1896, which gave Mr. Bryan his opportunity. But it must not be forgotten that those years of craze and disaster were quickly followed by the splendid unity of the Spanish War and the greatest era of achievement and progress which the nation has ever known.

So now, however adverse the immediate outlook, it is well to remember that after to-day there is another to-morrow. The vast wool-growing and manufacturing industry of the United States, in which and its associated trades five millions of our people are interested, has just escaped a very serious disaster. The same peril or a worse one may have to be faced next year. It is for the time being a period of partial demoralization in public affairs. Some men calling themselves protectionists in both Senate and House have allowed themselves to be stampeded into the preparation of bills that could never be recognized as protectionist measures. It is an extraordinary situation when Democratic Chairman Underwood, frankly hostile to all protection and a champion of tariff for revenue only, can accurately define the proposal of nominally Republican Senator La Follette as far less of a real protective measure than his own. "The La Follette bill," said Mr. Underwood, "has made practically no reduction on raw wool. It has made a reduction on the finished product. The burden of the La Follette bill on the manufacturer will be very much heavier because of the high tax it puts on wool and because of the reduction on the finished product than the Democratic bill will be. There is no use in concealing that fact. There is a broader margin between our tax on raw wool and the tax on the finished product than there is in the Senate amendment."

This statement of Chairman Underwood was not answered because it was unanswerable. It is a profoundly significant fact that the severest attacks upon American wool manufacturing throughout the past two or three years in Congress have come

not from Southern Democrats but from Middle Western Republicans of the "insurgent" type who are protectionists — indeed, the highest kind of protectionists — for the raw materials and crude food products of their farmer-constituents, but are approximate free traders for the elaborate finished manufactures of the skilled labor of the odious East. One of the unmistakable signs of the times is this shifting of the lines of sectional cleavage. It has well been said of Senator La Follette and men like him that their ideal Schedule K would have 100 per cent duty on raw wool and 10 per cent on cloths and dress goods.

A HISTORICAL REVIEW OF BRITISH EFFORTS TO CRUSH AMERICAN MANUFACTURES.

IN 1749 an act of the British Parliament was passed which encouraged the importation of American pig and bar iron into Great Britain by repealing the duties thereon, the object being to aid in the development of the finished iron trade of the mother country by supplying it with cheap raw iron and to stimulate the exportation of woollen and other British manufactures to the colonies in exchange for their iron. The act did not contemplate the encouragement of finished iron manufactures in the colonies, but just the reverse, for it provided as follows :

"That from and after the twenty-fourth day of June, 1750, no mill or other engine for slitting or rolling of iron, or any plating forge to work with a tilt-hammer, or any furnace for making steel, shall be erected, or, after such erection, continued in any of His Majesty's colonies in America; and if any person or persons shall erect, or cause to be erected, or, after such erection, continue, or cause to be continued, in any of the said colonies, any such mill, engine, forge, or furnace, every person or persons so offending shall, for every such mill, engine, forge, or furnace, forfeit the sum of two hundred pounds of lawful money of Great Britain." And further: "That every such mill, engine, forge or furnace so erected or continued, contrary to the directions of this act, shall be deemed a *common nuisance*," to be abated by "every governor, lieutenant-governor, or commander-in-chief of any of His Majesty's colonies in America, where any such mill, engine, forge, or furnace shall be erected or continued."

This oppressive and tyrannical act *was enforced*. In Pennsylvania the lieutenant-governor, James Hamilton, Esq., issued a proclamation, dated August 16, 1750, commanding the owners of every rolling and slitting mill, plating forge, and steel furnace in the province to appear before him, on or before the following twenty-first day of September, with "sufficient proofs whether the said mills, engines, forges, and furnaces respectively were used on the said twenty-fourth day of June or not;" also commanding the sheriffs of all the counties in the province to furnish lists, on or before the 21st of September, of all such establishments within their respective jurisdictions, and to certify "whether they or any of them were used on the said twenty-fourth day of June or not, as they and each of them will answer the contrary at their peril." Responses to this proclamation were made and are preserved. We have been shown in the library of the Historical Society of Pennsylvania an original copy of the proclamation, which was printed by Benjamin Franklin. In 1756, six years after this proclamation was issued, Acrelius stated that the Vincent steel works were not then in operation, and he afterwards added: "No one is allowed to make nails. The trip-hammers which were erected some years since were condemned on account of their interference with the importation from England."

The enactment of this law, which will forever remain a stain upon the good name of the British people, was only one of a series of oppressive measures which eventually led to independence. They all interfered with the development of the manufactures of this country, the act from which we have quoted exercising a depressing effect upon the iron industry of Pennsylvania and other colonies and provinces down to the Revolution.

When the war of the Revolution was over and the political independence of the United States was secured, Great Britain still sought, by means of restrictive measures, already enacted or specially devised, to prevent the industrial development of this country, so that its people might continue to be dependent upon the mother country for many crude and manufactured articles which, with proper encouragement from their own government, they could themselves produce. These restrictive measures, it is true, applied to other countries as well as to the United States, but upon no other country did they operate with such oppressive influence as upon this country. Skilled mechanics were prohibited from emigrating from Great Britain to other

countries, and the exportation of tools or utensils used in the silk, linen, cotton, or woolen manufacture was also prohibited — the penalties in both cases being severe. In 1785 the emigration from Great Britain of iron and steel artificers and workmen and the exportation of tools used in the manufacture of iron and steel were specifically prohibited, and in 1795 the prohibition of the exportation of tools and machinery used in the manufacture of iron and steel was reaffirmed with emphasis. In the same act the prohibition of the exportation of tools and machinery was extended to other manufactures. The first of these restrictions was not wholly repealed until 1825, and the exportation of machinery for manufacturing was not relieved of all restrictions until 1842.

The "Address of the American Society for the Encouragement of Domestic Manufactures," published in 1817, says: "In the beginning of the year 1792, when the report of General Hamilton, then Secretary of the Treasury, made by order of the House of Representatives, was published in England, it created such alarm that meetings were called in the manufacturing towns, and Manchester alone, at a single meeting, subscribed 50,000 pounds sterling toward a fund to be vested in English goods and shipped to this country for the purpose of glutting our market and blasting the hopes of our manufactures in the bud." The American market was accordingly flooded with British manufactured products. In the absence of duties that were really protective our manufacturing industries were greatly depressed by British competition until the occurrence of our second war with the mother country. After its close Lord Brougham, referring in 1816 to the flooding of American markets with British goods which had again taken place after the opening of our ports, exultingly proclaimed that "it was well worth while to incur a loss upon the first exportation, in order, by the glut, to *stifle in the cradle* those rising manufactures in the United States which the war had forced into existence, contrary to the natural course of things. Eighteen millions' worth of goods, I believe, were exported to North America in one year, and for a considerable part of this no returns have been received, while still more of it must have been selling at a very scanty profit."

In 1854 a British Parliamentary commission made this declaration: "The laboring classes generally, in the manufacturing

districts of this country, and especially in the iron and coal districts, are very little aware of the extent to which they are often indebted for their being employed at all to the *immense losses* which their employers voluntarily incur in bad times in order to *destroy* foreign competition and to gain and keep possession of foreign markets."

It will be remembered that in 1842 Congress passed a tariff act which had for its object the protection of American industries, and that in 1846 this wise act was repealed by a Congress that was chosen in 1844. To secure this repeal it has been charged that British gold was freely used in the Presidential and Congressional campaign of 1844. The "Philadelphia North American" for July 5, 1883, submits citations from "Niles's Register," published in 1844, in support of this charge. It says:

"In 'Niles's Register,' September 21, 1844, page 39, the editor, after quoting from the 'London Atlas' of a recent date a long paragraph concerning the effect of the election of Mr. Clay as president, adds: 'But it is not on mere essays and editorials that the interests of those foreigners are to be reposed in the case. We inserted a short time since a notice of a large fund having been raised by subscription in England for the purpose of effecting their views on the subject. The item was no doubt read with incredulity by others, as it was at first by ourselves, though we were satisfied of its truth before we inserted it. A late number of the "London Times" has the following paragraph with reference to the matter: "A subscription was recently opened to raise funds to circulate free trade tracts in foreign countries. About four hundred and forty thousand pounds were subscribed. Some of these tracts are to be printed in New York for circulation in the United States."' " The "North American" continues:

"The editor of the 'Register' continues his comments on circulating 'free trade tracts' in the United States, and what is likely to be done with the money, and then adds: 'The design we allude to has been over and over recognized in the London papers, and is considered by them as a legitimate object. If they can effect the repeal of the American tariff (*i.e.*, the tariff of 1842) one year's profits would pay them ten times over the outlay they consider it worth while to adventure to effect it.' "

Soon after the close of our Civil War there began an agitation

in this country for the repeal or substantial modification of what were invidiously termed "war duties," the agitators terming themselves Revenue Reformers. That the movement itself was not of American origin would seem to be abundantly proved by the fact that a large sum of money, which was mainly contributed by foreigners, was raised and disbursed in 1869 and 1870, in which years a determined effort was made to induce Congress to reduce duties. The "New York Tribune" for October 15, 1870, published a list of the contributors to this fund, chiefly "importers" and "bankers." The "importers" whose names are mentioned were not usually importers at all, but the agents of foreign manufacturers, as were undoubtedly the "bankers" who contributed. Of the \$57,934.82 which the "Tribune" was able to show had been collected to effect the repeal or the reduction of the "war duties," a balance of \$31,235.70 remained unexpended on the 1st of October, 1870. What became of this large balance the "Tribune" was subsequently apparently unable to discover, but the Congressional elections of October and November, 1870, doubtless absorbed it all, as we know that prominent protectionist Congressmen were then defeated through the use of money.

Mr. Theodore Van Wyck, of Newark, N.J., wrote to the "New York Tribune" under date of July 9, 1883, a letter which furnishes proof of the interference of the British Cobden Club in the Congressional campaign of 1880. Mr. Van Wyck says that in 1880 he received copies of free trade pamphlets from Thomas Bailey Potter, honorable secretary of the Cobden Club, accompanied by an autograph letter, and then adds: "To show that the Cobden Club is taking a great interest in the United States it is only necessary to turn to pages in the pamphlets mentioned by Mr. Potter. I found the following in 'Reports of Committees,' page 46: 'Your committee are at this moment (1880) proceeding with the circulation among the agriculturists of the Western States of America of many thousands of copies of a new pamphlet called "The Western Farmer of America," intended to explain to the cultivators of the soil the enormous disadvantage under which they suffer by reason of *the great burdens* laid upon them by the American protective tariff.'"—James M. Swank, in the *Bulletin of the American Iron and Steel Association*.

THOSE SO-CALLED WEAVERS' "FINES."

AN IMPORTANT DECISION FOR THE MILLS BY THE
SUPREME COURT OF MASSACHUSETTS.

A most important decision upholding the right of manufacturers to pay one rate for perfect and another rate for imperfect weaving has lately been rendered by the Supreme Court of the Commonwealth of Massachusetts in the case of the Commonwealth *v.* the Lancaster Mills, of Clinton. It involved a test of the constitutionality of the so-called weavers' fine law, Chapter 584 of the Acts of 1911, which provided that "no employer shall impose a fine upon an employee engaged in weaving for imperfections that may arise during the process of weaving."

The case originated in a complaint brought before the Second District Court of eastern Worcester that the Lancaster Mills had imposed a fine of seventy-one cents upon one Henry Dilling for imperfections arising during the process of weaving and in violation of the Act of 1911. It appeared that Dilling, who knew how to read and write, had been employed for several months in the weaving room of the Lancaster Mills, where a notice was duly posted giving the price-list for weaving, under date of March 30, 1908. This price-list was as follows:

LANCASTER MILLS.

Price List for Weaving.

Cloth Construction. 40½" Looms. Date, March 30, 1908.

No. of Shuttles.	No. of Harnesses.	Picks per Inch.	Reed Dents per Inch.	Yards per Cut.	Width.	Style of Goods.	Prices.	
							Price for 1st Quality	Price for 2d Quality
2	2	64	32	90	29	Gingham	\$1.00	\$.50
3	2	"	"	"	"		1.02	.51
4 or more	2	"	"	"	"		1.04	.52
2	4 or more	"	"	"	"		1.04	.52
3	4 " "	"	"	"	"	Shirting	1.05	.53
4 or more	4 " "	"	"	"	"		1.06	.53
2	2	66	36	120	34		1.41	.71
3	2	"	"	"	"		1.42	.71
4 or more	2	"	"	"	"		1.43	.72
2	4 or more	"	"	"	"		1.43	.72
3	4 " "	"	"	"	"		1.44	.72
4 or more	4 " "	"	"	"	"		1.45	.73

It was perfectly clear, therefore, to any intelligent employee that the price for second quality was one-half of that paid for first quality weaving, and all the weavers presumably accepted employment with a thorough knowledge of that fact. During the week ending December 2, 1911, a part of Dilling's work was found by the inspectors to be of second quality, and the weaver was held to be responsible for that condition. When he received his wages he was paid at the rates named in the posted notice for second quality work. It was not pretended that there was any unfairness in the grading of the work, and it was agreed that the amount by which the wages were decreased as a result was less than the loss to the defendant from the production of second quality cloth.

On this statement of facts the Lancaster Mills through counsel, Hon. Richard Olney and Charles G. Bancroft, Esq., asked the District Court to rule, first, "that the jury be instructed that on the evidence as presented the defendant as matter of law must be found not guilty and order a verdict accordingly;" second, "that the action of the defendant corporation upon the agreed statement of facts did not constitute a 'fine' within the meaning of the above-named statute."

But the court refused so to rule, and did rule as follows :

Upon the agreed statement of facts I am of the opinion as a matter of law, and so rule, that the transaction complained of amounted to the imposition of a fine within the terms and spirit of Chapter 584 of the Acts of 1911, and, therefore, you (the jury) are warranted in returning a verdict for the Commonwealth.

To this verdict counsel for the Lancaster Mills duly excepted to the refusal of the court to order a verdict for the defendant as a matter of law, and further excepted to such portion of the charge as was incompatible to the defendant's request for ruling, namely, the following :

Upon the agreed statement of facts I am of the opinion as a matter of law, and so rule, that the transaction complained of amounted to the imposition of a fine within the terms and spirit of Chapter 584 of the Acts of 1911, and, therefore, you are warranted in returning a verdict for the Commonwealth.

The jury in the District Court returned a verdict of guilty. The defendant's bill of exceptions was allowed, and the case

was carried to the Supreme Court of Massachusetts on these exceptions.

The argument of counsel for the Lancaster Mills was that the ruling of the District Court was erroneous, first because it wrongly construed the Act of 1911, and, second, because if such construction be correct the statute was clearly unconstitutional. In support of this contention counsel urged :

It is unnecessary to consider at length the history of the legislation of the Commonwealth which undertakes to regulate the relations between weavers and their employers as affected by imperfect weaving. The policy of the Commonwealth, as evidenced by the statutes now in force, is clear. One of them, the Statute of 1909, Chap. 514, Sect. 114, represents a policy which has been settled for twenty years, and which has been affirmed and reaffirmed by the legislature in every general or special codification of the laws since 1892. Its provisions are as follows :

"The system used by manufacturers of grading the work of a weaver shall not affect or lessen the wages of the weaver except for imperfections in his own work ; and in no case shall the wages of those engaged in weaving be affected by fines or otherwise unless the imperfections complained of are first exhibited and pointed out to the person whose wages are to be affected ; and a fine shall not be imposed upon any person for imperfect weaving unless the provisions of this section are first complied with and the amount of the fines are agreed upon by both parties. Whoever violates the provisions of this section shall be punished by a fine of not more than \$100 for the first offence and by a fine of not more than \$300 for each subsequent offence."

The salient features of this statute are these :

(a.) The manufacturers' classification system of work is recognized as not necessarily unlawful.

(b.) On the contrary, it is expressly recognized as valid when relating to imperfections in the weaver's own work.

(c.) But the system is operative to reduce wages only on two conditions, to wit, that the imperfections are first pointed out to the weaver, and that the amount of the fines (or deductions from wages) are agreed upon between the weaver and the employer.

(d.) This last requirement — that the weaver and his employer shall agree upon the amount of fines — makes the entire situation between weaver and employer, as respects this subject matter, one of contract.

The weaver can agree to the amount of the fine only on the assumption that he understands and agrees to the constituent elements of his agreement — that he knows what a fine is and

what it is for — that he knows a fine is a deduction from wages and is for imperfections in his own work.

(e.) In short, the policy of the Commonwealth as shown by the Statute of 1909 is to legalize fines or deductions from the weaver's wages for imperfections in his own work, provided such fines are the result of a contract made by the weaver and his employer under the statute and conformably to its limitations.

In the case at bar the agreed facts show conclusively that the relations of the parties were the contract relations warranted by the Statute of 1909:

(a.) Dilling had been employed by the defendant for several months.

(b.) He could read and write and was familiar with the terms of a placard posted in the mill stating the basis of his compensation and the deduction from the wages paid for first-class work that would be made for second-class work.

(c.) He not only knew the terms of the notice, but had accepted the same.

(d.) He had previously been paid for second-class work at the placard rate — competent inspectors having found the work defective and Dilling responsible for the defect.

(e.) The act complained of is paying him at the placard rate for second-class work done during the week ending December 2, 1911 — proper inspection having found the work imperfect and Dilling chargeable with the imperfect condition.

(f.) The foregoing circumstances show a contract between Dilling and his employer respecting the consequences of imperfect weaving as clearly as it could be shown by a written instrument — a contract, too, contemplated by the Statute of 1909 and conforming to its provisions.

(g.) The case at bar is on all-fours with the case of *Gallagher v. Hathaway Manufacturing Corporation*, 172 Mass. 230. In the latter case the judgment was apparently by a unanimous Court, the opinion being given by Mr. Justice Holmes, who alone dissented from the judgment in *Commonwealth v. Perry*, 155 Mass. 117.

The Statute of 1911 is as follows:

"No employer shall impose a fine upon an employee engaged in weaving for imperfections that may arise during the process of weaving."

1. This statute does not repeal the Statute of 1909 in express terms.

2. Neither is there any repeal of the Statute of 1909 by implication. If the legislature had intended to do away with the Statute of 1909 and to change the long-settled policy evidenced by that statute, it would have said so in so many words. Its failure so to do raises a presumption that it understood both statutes to be needed as covering distinct conditions and states of fact. This presumption is turned into a positive conclusion

by an examination and comparison of the provisions of the two statutes.

(a.) The Statute of 1911 prohibits a fine for any imperfections arising during the process of weaving, — the amount of the fine being immaterial, the cause of the imperfection being immaterial, and an agreement by the weaver to pay a fine as one of the terms of his employment being also immaterial.

(b.) The Statute of 1909, on the other hand, authorizes a fine upon a weaver when the contract relations between him and his employer justify it and are those described in this statute.

(c.) In other words, the two statutes occupy distinct fields, — the Statute of 1911 applying when nothing appears except the fact of imperfect weaving and a resulting fine, and the Statute of 1909 applying when, beside the imperfect weaving and the fine, it also appears that the fine has been imposed in accordance with the contract relations and under the conditions set forth in that statute.

(d.) Any other construction of the two statutes, a construction which would make the Statute of 1911 repeal the Statute of 1909, would impute to the legislature a purpose to re-enact the judicially invalidated Statute of 1891, Chap. 125. No such intent on the part of the legislature can reasonably be assumed.

(e.) The word "fine" is used in both statutes in the same sense, meaning a deduction from wages for imperfect weaving. The difference is that the Statute of 1909 sanctions the deduction under certain prescribed conditions, while that of 1911 forbids it under all circumstances.

The construction of the Statute of 1911 by the Court below makes the statute as applied to the agreed facts of record unconstitutional for the reasons set forth by this Court in *Commonwealth v. Perry*, supra.

1. Indeed, on such agreed facts the case against the validity of the Statute of 1911 is stronger than was the case against the Statute of 1891.

2. Theoretically and legally speaking (see dissenting opinion of Mr. Justice Holmes — *Commonwealth v. Perry*, supra, p. 125) the Statute of 1891 did not deprive the employer of a claim and a remedy against a weaver's imperfect work. It simply prohibited satisfying the claim by a deduction from wages — leaving to the employer his right of action against the weaver for damages for breach of contract.

3. But the Act of 1911, according to the Court's construction, does away with the employer's claim itself. His contract with the weaver is annulled and, in spite of the weaver's contract to the contrary, he must pay for bad work at the rate of wages fixed for good work, and cannot protect himself either by deduction from wages or by action at law for damages.

4. Section 1 of the Act of 1911 is merely Section 1 of the Act of 1891, with the words "or withhold the wages or any part of the wages of a" omitted.

It may be regarded as an experiment designed to test the legal value of the dictum of Chief Justice Knowlton in *Commonwealth v. Perry*, supra, p. 120. There is a sentence there which intimates that, if the Act of 1891 simply forbade the imposition of a fine for imperfect work, it might be possible to sustain it as a salutary law within the discretion of the legislature. But the context shows that what the chief justice means by a fine is "the arbitrary imposition of a fine or penalty by the employer." It is the arbitrariness which the chief justice thinks might be inhibited, a fine for bad work authorized by contract presenting a wholly different question and being held by him and the Court to be beyond the power of the legislature to interfere with.

The reasoning of the Court upon the main question adjudicated in *Commonwealth v. Perry*, supra, seems to be conclusive. It is supported by adjudications in many of the States of the Union. In the absence of any ground for supposing that the Court desires or intends to reconsider the doctrine of *Commonwealth v. Perry*, supra, the defendant does not feel itself called upon or at liberty to treat the doctrine as properly open to discussion in this case.

RICHARD OLNEY,
CHARLES G. BANCROFT,
Attorneys for Defendant.

OPINION OF THE SUPREME COURT.

Judge Sheldon for the Supreme Court presented this opinion :

Sheldon, J. It is provided by Statute 1911, Chap. 584, that "no employer shall impose a fine upon an employee engaged at weaving for imperfections that may arise during the process of weaving." Looking at the earlier Statute of 1891, Chap. 125, Sect. 1, and at the decision in the case of *Commonwealth v. Perry*, 155 Mass. 177, we are of the opinion that the word "fine" in the later statute must be taken to mean merely the arbitrary imposition of a penalty for an imperfection in weaving by a deduction from the amount of the wages to which the employee is entitled by his contract of employment, whether that amount has been determined by a quantum meruit or by a stipulation for a fixed rate of compensation. It is intended to prevent the employer from imposing a penalty for an imperfection in the finished product, whether or not due to the fault of the employee, and enforcing its collection by deducting it from what has become due to the employee. So construed, as was said by this Court in *Commonwealth v. Perry* (ubi supra) on pp. 120, 121, it could perhaps be sustained as a valid police regulation. See *Opinion of the Justices*, 163 Mass. 589; *Squire v. Tellier*, 18, 20; *Commonwealth v. Straus*, 191 Mass. 545, 550 et seq.; *Mutual Loan Co. v. Martell*, 200 Mass. 482, 484, *Opinion of the Justices*, 208 Mass. 619. But that question is not presented.

In the case at bar, it could at any rate have been found that the weaver had received exactly the wages for which he had contracted. The system adopted by the defendant was within the authority given by Statute 1909, Chap. 514, Sects. 114-116, and it is not contended that any of the requirements of those sections have been violated. The Act of 1911 does not purport to repeal any of the provisions, and it is not necessary to construe it as having that effect.

If the present act did repeal the provisions of Statute 1909, Chap. 514, above referred to, and went to the full extent for which the Commonwealth has contended in this case, it would be difficult, without overruling *Commonwealth v. Perry*, 155 Mass. 177, to maintain its constitutionality.

The rulings requested by the defendant should have been given. *Gallagher v. Hathaway Manufacturing Co.*, 172 Mass. 230.

Exceptions sustained.

The decision of 1891 in the case of the *Commonwealth v. Perry*, which the court announced that it was not prepared to overrule, was as follows:

The manufacture of cloth is an important industry, essential to the welfare of the community. There is no reason why men should not be permitted to engage in it. Indeed, the statute before us recognizes it as a legitimate business, into which anybody may freely enter. The right to employ weavers, and to make proper contracts with them, is therefore protected by our Constitution; and a statute which forbids the making of such contracts, or attempts to nullify them, or impair the obligation of them, violates fundamental principles of right which are expressly recognized in our Constitution. If the statute is held to permit a manufacturer to hire weavers, and agree to pay them a certain price per yard for weaving cloth with proper skill and care, it renders the contract of no effect when it requires him, under a penalty, to pay the contract price if the employee does his work negligently and fails to perform his contract. For it is an essential element of such a contract that full payment is to be made only when the contract is performed. If it be held to forbid the making of such contracts, and to permit the hiring of weavers only upon terms that prompt payment shall be made of the price for good work, however badly their work may be done, and that the remedy of the employer for their derelictions shall be only by suits against them for damages, it is an interference with the right to make reasonable and proper contracts in conducting a legitimate business, which the Constitution guarantees to every one when it declares that he has a "natural, essential, and unalienable" right of "acquiring, possessing, and protecting property."

This new decision of the Supreme Court of Massachusetts has brought relief to manufacturers against a law which they have regarded as a grave injustice. It is assumed that hereafter the right of employers to pay one rate for perfect and another for imperfect work will not be challenged, though the labor unions threaten to seek an amendment and stiffening of the Act of 1911. In New Bedford, a few days after the decision was announced, the local manufacturers' association, comprising nearly all of the fine goods cotton mills, posted notice of a resumption of the system of different rates of pay to weavers. But the notices all added that, "To relieve any doubt as to the attitude of the corporation toward the weavers, particularly in the matter of what is incorrectly termed 'fining,' a sum equal in amount to the difference between that portion of cloth for which second quality price has been paid and what it would have been if first quality price will be divided for six months and paid to those weavers in our employ at the time of distribution and who have been in our employ the last three months previous to the date of payment, which will be the first weeks in September and March. By this method the total amount paid to the weavers as a whole will be equal to the first quality price." It is believed that the fact that under the new plan the mills do not keep the money, but distribute it among all weavers, share and share alike, will make for a more friendly understanding between the corporations and their employees, the opprobrium of the word "fine" being satisfactorily eliminated.

On Monday, July 15, a strike of weavers occurred in twelve of the New Bedford cotton mills, representing the major part of the industry. This strike was ostensibly in protest against the new order of the manufacturers relative to graded pay of weavers. On Tuesday, the 16th, the plants affected were entirely closed by order of their officials, throwing 14,000 operatives into idleness. It was recognized that a prolonged struggle was then begun.

NEW TEXTILE DIRECTORIES.

THE Lord & Nagle Company, publishers of the "Textile World Record," present their "Official American Textile Directory" for 1912-13. This is the eighteenth year of the compila-

tion of this valuable work in which all the textile establishments in the United States, Canada, and Mexico are enumerated, arranged by location alphabetically, with maps showing the location of the principal textile cities and towns. The number and kind of mills in each State are set forth in a tabular statement, and there are special data regarding the yarn trade, bleaching, dyeing, printing and finishing, selling agents, commission houses and converters. There is much important information as to raw materials, and in a separate department the mills are classified according to the goods made. All this work is performed with painstaking skill and care and thorough, practical knowledge of the great textile industries. The price of the office edition is \$3; of the traveler's edition, \$2; of the vest-pocket edition relative to the various sections, \$1. The address of the publishers, the Lord & Nagle Company, is 144 Congress Street, Boston.

The "Blue Book Textile Directory" for 1911-1912—the twenty-fourth annual edition—contains a carefully classified list of cotton, woolen, silk, jute, flax, and linen manufacturers, dyers, bleachers, and printers, commission merchants, converters and brokers, yarn dealers, cotton, wool, hair, waste and rag dealers, raw, thrown and spun silk dealers, dry goods dealers, etc., and a full textile supply directory. This volume is notably well printed and arranged. Its price is \$4 for the office and \$3 for the pocket edition, post or express paid. The publisher is the Davison Publishing Company, 407 Broadway, New York.

SOME PECULIARITIES OF THE WOOL FIBER.

By W. T. RITCH.

(*From the Canadian Textile Journal.*)

DISCOVERY OF THE STRUCTURE.

As early as 1664 Dr. Hooke read a paper before the Royal Society upon the structure of various hairs, but the microscopic power at his command was very limited, and the observations consequently very incorrect. About the year 1690 Leeuwenhoek turned his attention to the study of the wool fiber, but although several good specimens appear in his works they are not correct, probably owing to the defects of the primitive instruments at

his disposal, as he was a most careful observer. In the year 1742 Henry Baker read a paper on the subject before the Royal Society, and dwelt at considerable length upon the existence of a scaly formation on the wool fiber, but little advance was made until the invention of the compound microscope and its improvement at the beginning of the nineteenth century.

Mr. Youatt, whose work on sheep is well known, claims to have been the first person who really discovered the true nature of the wool fiber. It is quaintly described in his work in the following words: "On the evening of the 7th of February, 1835, there were six scientific gentlemen assembled in my parlor. A fiber was taken from a Merino fleece and placed on the frame to be examined as a transparent object. The power 300 diameter was used, and the lamp was of the common flat-wick kind. The focus was readily found, as there was no trouble in the adjustment of the microscope and we had a perfect ocular demonstration of the irregularities in the surface of wool — the palpable proof of the cause of one of its most valuable properties — the disposition to felt. The edges were evidently hooked or more properly serrated; they resembled the teeth of a very fine saw. All these projecting indented edges pointed up in a direction from root to point."

Since Youatt made this discovery, great improvements have been made in microscopes and still greater improvements in photography, so that a perfect knowledge of the structure of the wool fiber is now within the reach of every one who feels interested in this subject.

SUINT AND YOLK.

These two terms are more frequently mixed up than any other in connection with wool growing. Even wool experts are frequently guilty of using one for the other. Although both come from the same source, they flow through entirely different channels. Both are grease from the sheep, but one nourishes the fiber internally, while the other nourishes it externally, in addition to serving other essential purposes. Suint circulates through the fiber only, quickly evaporates when exuded through the scales, sometimes leaving a residue which becomes a kind of enamel on the surface of the fiber. Yolk oozes from the pores of the skin in the form of perspiration and congeals slowly, often leaving a residue near the surface of the fleece, somewhat

resembling the yolk of an egg. A natural, healthy flow of both is necessary for the production of good wool, but an excessive accumulation of yolk reduces the value of the wool when sold in the grease. In Merino sheep, yolk is found in three shades — brown, salmon, and canary. Brown generally denotes the age or advanced stage of congealed yolk, but the presence of canary or primrose-colored yolk has more attraction for the wool expert than a pink skin has for a breeder of mutton sheep. Salmon-colored yolk usually indicates less density and a coarser fiber. When washing a sheep before shearing, the eradication of dirty and congealed yolk is necessary, but severe washing disturbs the liquid or oily yolk at the roots, and also the suint in the fibers and is, therefore, detrimental to the wool when marketed. Broadly speaking, yolk is the common term used by sheep breeders and others for every description of grease in wool, while suint is more a technical term.

CURL IN WOOL FIBERS.

The crimp, or wavy and curly nature of the wool fiber is one of the peculiarities which distinguish it from hair. Numerous theories are advanced in explanation of this peculiarity, but many of these are contradictory and few are considered satisfactory.

In 1867 Mr. N. Burgess, then a recognized authority on the structure of the wool fiber, read a paper before the Queckett Microscopical Club, and gave this explanation: "I am of the opinion, with respect to the growth of wool, that as soon as the point of the fiber has protruded through the skin of the animal, a series of growths take place, a small part of the epidermis is converted into wool, and then a rest ensues. One side grows faster than another, and hence the curly form of the fiber. When another growth takes place another ring is added, the new growth pushing up the hair from below and so adding to its length, straightness, and girth of the joints, and possibly with a variation in the thickness of the cylindrical portion of the fiber."

Professor Bowman, however, does not consider this a correct explanation, as the epidermis is not converted into wool, because the fiber is formed within the hair follicle before its protrusion out of the skin, although the unequal contraction of the various constituent parts of the hair, as the cells become more consoli-

dated after leaving the skin, will account for the phenomena. He says that the cells which are to constitute the fiber are large and plastic within the lower part of the follicle, and become more consolidated as the fiber is pushed upwards, the cells which constitute the cortical part becoming elongated by the pressure to which they are subjected by the shrinking in of the outer cells. These outer cells shrink till they completely collapse, and thus form the epidermal plates, although they probably retain the laminated structure, and are capable of expanding again when subjected to variations in pressure, moisture, and temperature; and, as they shrink in, their gelatinous nature enables them to adhere together till they form a solid epidermal layer, which tightly binds the constituent cells of the cortical part. Unequal shrinking of this ring would give a tendency to curl.

There is no doubt, however, but that the curl in wool is a most valuable property, and from whatever cause it arises it seems to increase or diminish just as the finer character of the wool does. The coarser wools exhibit the curl least, and the finest most. The curl in Down wools is somewhat crimpy, while the curl of long wools is more wavy.

A comparison of the number of curls or waves to the inch in a few wools may possibly be interesting:

Wool.	Curls per Inch.
Australian Merino	24 to 30
Southdown and Ryeland	13 to 18
Radnor	12 to 16
Shropshire	11 to 15
Gritstone	11 to 14
Romney Marsh.....	8 to 12
Roscommon.....	7 to 11
Leicester	6 to 10
Lincoln and Cotswold	3 to 5
South Devon.....	2 to 4

GRAY FIBERS.

Ashen-gray fibers are often found in the fleeces of the fine-wooled breeds. They must not be mistaken for black or brown fibers, often found in the neck ruff of black-faced Down sheep. It is a true wool fiber in every sense of the term, and the gray tint is so light that it is not readily noticed in greasy wool. Wool buyers, however, have a keen eye for these gray fibers and

seldom fail to notice them during their examination of samples previous to the auction sale. When the wool is scoured gray fibers are seen distinctly, but they are too numerous and too troublesome to pick out, therefore the wool must either be specially treated, or used for dyeing dark shades. When wool containing some of these gray fibers is required for dyeing in light delicate shades it is put through a slight bleaching process. The bleaches usually employed are: bisulphite of soda, ammonia, permanganate, hydrogen peroxide, etc. This is invariably successful, but it means extra cost in production, consequently keen buyers seldom pay the full market price for wool containing gray fibers.

Tobacco dips have a tendency to stain the wool and that is one of the chief reasons for their unpopularity and limited use at present. All tobacco-stained wool has to be treated with the same bleaching chemicals, therefore keen buyers never pay the full market price for wool showing traces of this stain.

Compared with diseased fibers and kemps, ashen-gray fibers are of slight importance, and they are less frequent in mutton sheep than in Merinos and crossbreds. There are several causes for gray fibers, but the chief one is careless breeding. In mutton sheep, careless breeding may be said to be the only cause, therefore we may put this down to grade ewes as a rule, and more especially to the use of the scrub ram.

COTS.

Under certain conditions, wool has a tendency to felt on the back of the sheep and form what are known as "cots," which are nothing more than a tangled mass of fibers. These are a source of annoyance and loss both to the farmer and the manufacturer, as they deteriorate the value of the wool, and have to be removed in the process of sorting. The cause of this coting is somewhat obscure and varies much, both in different sheep and different seasons. It is generally found that there is an absence of suint amongst the cotty mass as compared with free fibers, but whether this is a cause or an effect is a point disputed by many of the best authorities on this subject. The tangling may arise from want of lubrication of the fibers, or the thickness of the felt may hinder the free discharge of yolk from the skin. The fact that this tendency varies much in individual sheep may arise from individual action, as all sheep do not behave in the same manner

when suffering from the same discomfort. Restlessness and rubbing or rolling when lying down would cause the fibers to be thrown across each other in all directions, and with an insufficient supply of suint they would readily become entangled and matted. The restlessness on the part of the sheep which produces this matted condition of the fleece may arise from several causes, such as an unhealthy condition of the blood or the painful itching caused by lice or other parasites. Close confinement in dark barns and too much heat-producing foods will also cause cotting.

When heavy coal-oil dips are used for sheep with matted fleeces, this condition is not improved, but often becomes worse. The partially matted locks cling together, or lie closer, preventing the roots from having free ventilation, while the natural heat of the animal and the weight of the body when resting causes further matting. Some coal-oil dips irritate the skin for fully fifteen minutes after dipping, causing the young sheep especially to be more restless and more inclined to rub than before.

Whenever a fleece has the least tendency to "cot" or "mat" the first thing to be done is to use an arsenic and sulphur dip, which will in all cases cure almost any external evil on a sheep likely to cause a cotted fleece. In less than a week you will observe a wonderful improvement in the wool. If the sheep is still restless and inclined to rub the day after using this dip, you may be sure that it is suffering from some *internal* complaint, most probably an unhealthy condition of the blood.

When a fleece is once cotted, no dip will disentangle the felted parts, but a fresh growth of healthy wool will immediately begin after dipping. The cotted portions should be clipped off as early as possible, providing there is a sufficient covering of wool left to protect the sheep from cold.

Leicester, Lincoln, and Cotswold fleeces are most liable to cot. Down fleeces seldom or never cot, even when the sheep suffer from the same discomfort which causes it in the long-wooled breeds. Very often Down sheep, when suffering from the same trouble which causes "cottings" or a felting tendency in long-wooled breeds, will lose portions of their wool or become badly covered and even quite bare on the belly. Flockmasters noticing this unfortunate condition may rest assured that it is high time for them to give more attention to dipping and variation in diet.

KEMPS.

Notwithstanding the fact that there are millions of wool fibers on one sheep, no two fibers are exactly alike when examined with a powerful microscope. Each hair has its own individual characteristic formation and some slight variation in the number of imbricated scales. It is not surprising, therefore, that the mechanical structure of some fibers may, under certain circumstances, exhibit peculiar variations from the normal type. Although general conformity prevails, such erratic formations only serve to show how little there is in any organic structure which can be looked upon as fixed and invariable. These variations may occur in many of the separate parts of which the wool fiber is composed. Sometimes these irregularities occur in the outer or epithelial layer of the fiber, as there are generally great variations in the size and arrangements of the horny plates which form the outer covering. Very often there are more of these plates being consolidated into one, until there is a considerable length of the fiber entirely destitute of the imbricated scales, which are, under normal conditions, such a distinctive feature.

This part of the fiber usually appears like an ivory ring or ferrule on the otherwise scaly stem. In most cases this continuity of the outer plates does not appear to be dependent upon the inner structure of the fiber, because that, when examined by transmitted light, remains the same, and the inner cells and medulla are quite visible. These deformed fibers are what are generally known as "flat kemps." They are always difficult to dye, but treated with care, the difficulty may occasionally be overcome, as the central part of the hair is usually pervious to dyestuffs. Sometimes the change is more radical, and the whole substance of the fiber assumes a more dense appearance until the cellular character of the cortical part is entirely obliterated, and the fiber resembles an ivory rod, without any internal structure being visible. "Kempy wool" is a constant source of annoyance to the spinner and manufacturer, because such fibers not only have no felting property, and thus weaken the tenacity of the yarn, but they always resist the action of reagents which are used in dyeing. For this reason they generally remain uncolored and spoil the appearance of the surface of the fabric. Even when the dye does take some effect it is seldom the same tint and is never indelible; therefore dyers are sometimes blamed when the fault is really the presence of kempy fibers in the wool.

Kempy fibers are less common in the more cultivated breeds of sheep than in the wilder or more neglected breeds. Pure bred sheep are generally free from "kemps" unless there is persistent inbreeding. In crosses between coarse long wools and Downs kemps are frequently found in the neck near the head, and also in the britch, while they are always more or less present in mongrel breeds. In some parts of Russia and in many parts of Asia where the flocks are semi-wild, and no attention is given to the selection of rams, kemps are more or less present in almost every fleece. When kemps occur in the fleeces of cultivated sheep they are chiefly confined to the neck near the head, and the short wool of the legs near the body. It is estimated by a reliable authority that an average kemp is about three times the diameter, and fully one-third the length, of the full grown true fibers among which it grows.

Every authority on wool is firmly convinced that the frequent occurrence of kempy fibers in the wool of cultivated sheep is mainly due to the use of culled rams and more especially scrub rams. The use of scrub rams in any district not only produces objectionable and unprofitable wool to the farmers who use such rams, but it also spoils the reputation and market value of the good wool in that particular locality.

THE RELATION OF THE HORSE-POWER TO THE KILOWATT.

THERE was, before 1911, no precise definition of the horse-power that was generally accepted and authoritative, and different equivalents of this unit in watts are given by various books. The most frequently used equivalent in watts, both in the United States and England, has been the round number, 746 watts; and in 1911 the American Institute of Electrical Engineers adopted this as the exact value of the horse-power. It is obviously desirable that a unit of power should not vary from place to place, and the horse-power thus defined as a fixed number of watts does indeed represent the same rate of work at all places. Inasmuch as the "pound" weight, as a unit of force, varies in value as the acceleration of gravity varies, the number of foot-pounds per second in a horsepower accordingly varies with the latitude and altitude. It is equal to 550 foot-

pounds per second at 50° latitude and sea level, approximately the location of London, where the original experiments were made by James Watt to determine the magnitude of the horse-power.

The "continental horse-power," which is used on the continent of Europe, differs from the English and American horse-power by more than 1 per cent, its usual equivalent in watts being 736. This difference is historically due to the confusion existing in weights and measures about a hundred years ago. After the metric system had come into use in Europe, the various values of the horse-power in terms of local feet and pounds were reduced to metric units and were rounded off to 75 kilogram-meters per second, although the original English value was equivalent to 76.041 kilogram-meters per second. Since a unit of power should represent the same rate of work at all places, the "continental horse-power" is best defined as 736 watts; this is equivalent to 75 kilogram-meters per second at latitude 52° 30', or Berlin. The circular¹ gives tables showing the variation with latitude and altitude of the number of foot-pounds per second and of kilogram meters per second in the two different horse-powers.

These values, 746 and 736 watts, were adopted as early as 1873 by a committee of the British Association for the Advancement of Science. The value, 0.746 kilowatt, will be used in future publications of the Bureau of Standards as the exact equivalent of the English and American horse-power. It is recognized, however, that modern engineering practice is constantly tending away from the horse-power and toward the kilowatt. The Bureau of Standards of the Department of Commerce and Labor and the Standards Committee of the American Institute of Electrical Engineers recommend the kilowatt for use generally instead of the horse-power as the unit of power. — *U.S. Bureau of Standards, June 1, 1912.*

WOMEN'S WAGES IN PROVINCIAL FRANCE.

(FROM CONSUL CARL BAILEY HURST, LYON.)

IN view of the constant agitation for increased wages by nearly all classes of skilled manual labor in this neighborhood, the statistics recently published by the French Government that show

¹ Circular not reproduced.

the pay earned by women in provincial France are of particular interest at the present moment. The occupations given are those in which women have been regularly engaged and the average daily wages are set forth at five-year intervals:

OCCUPATIONS.	1896.	1901.	1906.	1911.
Ironers	\$0.35	\$0.37	\$0.39	\$0.41½
Dressmakers .....	.38	.38	.40	.44
White-goods sewers .....	.34	.34	.37	.40
Waist makers .....	.40	.44	.44	.48
Lace makers .....	.39	.42	.39½	.41
Embroiderers .....	.42	.44	.43½	.47
Milliners .....	.40	.41	.44	.48

In one or two of the larger cities the wages have been somewhat higher, except for dressmakers. The general average increase during the fifteen years has been about 15 per cent. In provincial France there has been a gradual augmentation for all of the pursuits given, but the increase has been only about 13 per cent. If one goes back to the middle of the last century it will be found that the wages paid women have risen by about 90 per cent, while men's wages for skilled manual labor have considerably more than doubled.

IRONERS, SEAMSTRESSES, AND LACE WORKERS.

Women ironers are occupied often 300 days in the year, rarely less than 200. This occupation, which requires a careful apprenticeship here, is regarded as offering regular employment. While the figures in the table show the average paid, there are frequent variations, six cents an hour being considered good pay and three cents an hour the minimum. Wages are a trifle higher in winter than in summer and a work-day is seldom less than ten hours.

Dressmakers are employed on an average between 260 and 270 days a year, with pay running from five cents to three cents an hour. White-goods sewers employed in preparing household linen, lingerie, etc., are not occupied as many days as ironers and dressmakers. There is, however, for this class a great difference between a good and a bad season. The work-day is never

less than ten hours and payment has been recorded as low as two cents an hour.

Waist makers are employed on an average of about 270 days a year, with rarely less than ten hours a day. As payment is often made by piece, the more dexterous hands receive higher pay, but the average return did not exceed during the past year more than forty-eight cents a day. Lacemakers are credited with being engaged, although for no fixed number of hours, for about 250 days a year. In this district, where a large amount of hand-made lace is turned out, many women combine lace-making with their domestic work and all spare moments are given to the production of fine lace. Even women and girl cowherds and goat-herds take lace with them to the fields when tending the animals. Lace-making is widely diffused in rural districts in this part of France and payment is sometimes astonishingly meager.

EMBROIDERERS AND MILLINERS — INCREASE ANTICIPATED.

Women regularly engaged in embroidery are fully busy between 250 and 290 days of a year. The amount received per hour is rarely less than three cents and sometimes as high as ten cents for especially clever hands. The work-day is given between ten and eleven hours.

Milliners are occupied nearly the entire year. Although there are variations for different localities, the average figure is somewhat less than 280 days a year. The pay is rarely lower than three cents and scarcely ever above seven cents, about 10 per cent more during the winter than the summer.

As there is a growing solidarity among women wage-earners, there is every reason to believe that the average paid will be sensibly increased during 1912. A possible exception will have to be made for lace makers, among whom concerted action is impracticable. The higher cost of living and steady demand for skilled female labor are sure to bring up the remuneration for women engaged in bread-winning occupations in this district.

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL AND MANUFACTURES OF WOOL FOR THE TWELVE
MONTHS ENDING JUNE 30, 1911 AND 1912.

GROSS IMPORTS.

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending June 30.		Values for Twelve Months ending June 30.	
	1911.	1912.	1911.	1912.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, ETC., AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing (dutiable) —	<i>Pounds.</i>	<i>Pounds.</i>		
Imported from—				
United Kingdom	14,628,205	30,928,128	\$3,458,004	\$6,991,933
Belgium	41,891	62,478	9,077	11,868
Argentina	13,432,005	21,147,922	2,552,594	3,713,274
Uruguay	572,955	2,969,495	123,665	578,820
Australia and Tasmania . . .	9,119,624	13,032,868	2,387,365	3,173,553
Other countries	2,310,165	3,062,438	513,616	639,745
Total	40,104,845	71,203,329	\$9,044,321	\$15,106,193
Class 2—Combing (dutiable)—				
Imported from—				
United Kingdom	7,153,236	11,700,246	\$1,865,475	\$2,714,271
Canada	1,071,759	703,482	261,475	174,596
South America	3,069,443	1,524,382	730,078	376,168
Other countries	1,162,030	1,629,554	423,655	586,999
Total	12,456,468	15,557,664	\$3,280,683	\$3,802,034
Class 3—Carpet (dutiable)—				
Imported from—				
United Kingdom	21,026,462	23,195,998	\$3,100,852	\$3,715,918
Russian Empire	15,403,832	20,757,933	2,097,076	2,829,328
Other Europe	8,898,228	12,902,495	1,187,742	1,746,300
Argentina	3,780,755	4,429,123	455,888	516,928
Chinese Empire	28,089,334	32,060,405	3,070,472	3,655,382
East Indies	2,043,405	4,440,606	243,789	514,305
Turkey in Asia	4,880,512	7,780,616	647,433	1,071,331
Other countries	963,800	1,072,541	99,749	120,623
Total	85,086,328	106,639,720	\$10,903,001	\$14,170,115
Total unmanufactured . .	137,647,641	193,400,713	\$23,228,005	\$33,078,342
MANUFACTURES OF—				
Carpets and carpeting (duti- able)—	<i>Sq. Yards.</i>	<i>Sq. Yards.</i>		
Imported from—				
United Kingdom	138,766	140,385	\$393,131	\$445,574
Turkey in Europe	330,488	256,917	1,674,764	1,411,338
Asia	441,065	379,466	1,368,940	1,647,541
Other countries	93,422	64,481	370,970	346,351
Total	1,003,741	841,249	\$3,807,805	\$3,850,804

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL, Etc.GROSS IMPORTS. — *Continued.*

ARTICLES AND COUNTRIES.	Quantities for Twelve Months ending June 30.		Values for Twelve Months ending June 30.	
	1911.	1912.	1911.	1912.
	<i>Pounds.</i>	<i>Pounds.</i>		
Clothing, ready-made, and other wearing apparel (dutiable) . .	.....	.....	\$2,274,756	\$2,171,477
CLOTHS— (dutiable)—				
Imported from—				
United Kingdom	2,904,863	2,606,475	\$3,258,426	\$2,994,215
Belgium	517,516	474,229	560,642	530,932
Germany	1,013,456	785,471	994,671	786,814
Other countries	291,444	252,935	328,768	318,517
Total	4,727,279	4,119,110	\$5,142,507	\$4,630,478
DRESS GOODS, WOMEN'S AND CHILDREN'S— (dutiable)—	<i>Sq. Yards.</i>	<i>Sq. Yards.</i>		
Imported from—				
United Kingdom	16,793,766	9,670,545	\$3,122,355	\$1,908,994
France	8,906,749	3,493,228	1,943,121	814,860
Germany	4,591,737	2,162,516	1,164,122	533,356
Other countries	122,091	88,956	32,968	21,988
Total	30,414,343	15,415,245	\$6,262,566	\$3,279,198
All other (dutiable) . . . . .	.....	.....	\$1,082,157	\$980,662
Total manufactures of . . . . .	.....	.....	\$18,569,791	\$14,912,619

COMPARATIVE STATEMENT OF IMPORTS AND EXPORTS OF
WOOL, ETC.— *Concluded.*

EXPORTS OF WOOL AND MANUFACTURES OF.

FOREIGN.				
ARTICLES.	1911.	1912.	1911.	1912.
	Quantities.	Quantities.	Values.	Values.
WOOL, HAIR OF THE CAMEL, GOAT, ALPACA, ETC., AND MANUFACTURES OF:				
UNMANUFACTURED—				
Class 1—Clothing (durable) lbs .	6,728,093	1,213,449	\$1,602,614	\$268,540
Class 2—Combing “ “ .	419,166	15,699	94,958	4,118
Class 3—Carpet “ “ .	1,058,440	490,722	149,754	66,581
Total unmanufactured	8,205,699	1,719,870	\$1,847,326	\$329,239
MANUFACTURES OF—				
Carpets and carpetings, sq. yds., durable	5,695	3,226	\$19,207	\$32,222
Clothing and other wearing ap- parel, durable			11,569	11,023
Cloths, pounds, durable	36,717	28,194	32,435	25,060
Dress goods, women's and chil- dren's, sq. yds., durable . . .	277,165	189,942	53,422	34,602
All other, durable			45,490	15,176
Total manufactures of			\$162,123	\$118,083
DOMESTIC.				
WOOL, AND MANUFACTURES OF:				
Wearing apparel			\$1,450,475	\$1,743,022
All other			842,998	791,879
Total			\$2,293,473	\$2,534,901

QUARTERLY REPORT OF THE BOSTON WOOL MARKET
FOR APRIL, MAY, AND JUNE, 1912.

DOMESTIC WOOLS. (GEORGE W. BENEDICT.)

	1912.			1911.
	April.	May.	June.	June.
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.				
(WASHED.)				
XX and above	29 @ 30	29 @ 30	29 @ 30	27 @ 28
X	28 @ 29	28 @ 29	28 @ 29	26 @ 27
Blood	34 @ 35	34 @ 35	34 @ 35	30 @ 31
"	33 @ 34	33 @ 34	34 @ 35	29 @ 30
"	35 @ 36	35 @ 36	35 @ 36	29 @ 30
Fine Delaine	31 @ 32	31 @ 32	31 @ 32	29 @ 30
(UNWASHED.)				
Fine	21½ @ 22	22	22	18 @ 19
Blood	27 @ 28	27 @ 28	27 @ 28	24 @ 25
"	27 @ 28	27 @ 28	27 @ 28	23 @ 24
"	28 @ 29	28 @ 29	28 @ 29	22 @ 23
Fine Delaine	26 @ 26½	26 @ 26½	26 @ 26½	22 @ 23
MICHIGAN, WISCONSIN, NEW YORK, ETC.				
(WASHED.)				
Fine	33 @ 34	33 @ 34	34 @ 35	28 @ 29
Blood	32 @ 33	32 @ 33	34 @ 35	27 @ 28
"	33½ @ 34½	33½ @ 34½	34 @ 35	27 @ 28
Fine Delaine	30 @ 31	30 @ 31	30 @ 31	28 @ 29
(UNWASHED.)				
Fine	20 @ 20½	20 @ 21	20 @ 21	17 @ 18
Blood	26½ @ 27½	26 @ 27	26 @ 27	23 @ 24
"	26½ @ 27½	26 @ 27	26 @ 27	23 @ 23½
"	27 @ 28	27 @ 28	27 @ 28	22½ @ 23
Fine Delaine	24½ @ 25½	24½ @ 25½	24½ @ 25½	22 @ 23
KENTUCKY AND INDIANA.				
(UNWASHED.)				
Blood	27½ @ 28	27 @ 28	27 @ 28	23 @ 24
"	28 @ 28½	28 @ 28½	28 @ 29	22 @ 23
Braid	24 @ 25	24 @ 25	24 @ 25	20 @ 21
MISSOURI, IOWA, AND ILLINOIS.				
(UNWASHED.)				
Blood	26 @ 27	26 @ 27	27 @ 27½	22 @ 23
"	27 @ 27½	27 @ 28	27 @ 28	22 @ 22½
Braid	24 @ 24½	24 @ 25	24 @ 25	19 @ 20
TEXAS.				
(SCOURD BASIS.)				
12 months, fine, and fine medium . .	53 @ 55	53 @ 55	53 @ 55	45 @ 47
6 to 8 months, fine	46 @ 48	48 @ 50	48 @ 50	42 @ 43
12 months, medium	48 @ 50	48 @ 50	48 @ 50	42 @ 43
6 to 8 months, medium	41 @ 43	41 @ 43	42 @ 45	38 @ 40
Fall, fine and fine medium	41 @ 43	43 @ 45	43 @ 45	38 @ 40
" medium	40 @ 41	40 @ 41	42 @ 43	36 @ 38
CALIFORNIA.				
(SCOURD BASIS.)				
Free, 12 months	48 @ 50	48 @ 50	50 @ 51	45 @ 47
" 6 to 8 months	43 @ 44	43 @ 44	44 @ 45	42 @ 43
Fall, free	38 @ 40	38 @ 40	40 @ 41	37 @ 38
" defective	32 @ 34	33 @ 35	33 @ 36	30 @ 32
TERRITORY WOOL: Montana, Wyoming, Utah, Idaho, Oregon, etc.				
(SCOURD BASIS.)				
Staple, fine and fine medium	60 @ 62	60 @ 62	60 @ 62	51 @ 52
" medium	55 @ 56	55 @ 56	56 @ 57	47 @ 48
Clothing, fine and fine medium . . .	50 @ 53	50 @ 53	51 @ 53	45 @ 46
" medium	48 @ 50	48 @ 50	48 @ 50	40 @ 42
NEW MEXICO. (Spring.)				
(SCOURD BASIS.)				
No. 1	48 @ 50	48 @ 50	50 @ 52	45 @ 47
No. 2	44 @ 45	44 @ 45	46 @ 47	41 @ 42
No. 3	38 @ 40	38 @ 40	40 @ 41	31 @ 33
No. 4	35 @ 37	35 @ 37	37 @ 39	30 @ 32
NEW MEXICO. (Fall.)				
(SCOURD BASIS.)				
No. 1				37 @ 38
No. 2				32 @ 34
No. 3				26 @ 27
No. 4				24 @ 25
GEORGIA AND SOUTHERN.				
Unwashed	23 @ 24	23 @ 24	23 @ 24	20 @ 21

DOMESTIC WOOL.

JUNE 30, 1912.

The past quarter the market has been unusually steady for this season of the year. The new wools have come on to a market comparatively bare of stock and have therefore met with ready sale at prices which have paid a fair profit to dealers.

Notwithstanding the fact that tariff matters are still unsettled, the fear of drastic legislation in the near future has for the time being ceased to be a serious menace to the trade and manufacturers feel assured that they will have a satisfactory light weight season as the supply of manufactured goods in jobbers' hands is very low.

Statistically the wool situation ought to be very strong as practically no old wool has been carried over and all indications point to a shortage of from twenty to twenty-five million pounds in the new clip.

The consumption of wool at present is larger than for some time past and foreign markets are strong and advancing.

GEORGE W. BENEDICT.

PULLED WOOLS. (*Scoured basis.*) (W. A. BLANCHARD.)

	1912.			1911.
	April.	May.	June.	June.
Extra, and Fine A	53 @ 58	54 @ 60	55 @ 62	57 @ 65
A Super	50 @ 52	51 @ 53	53 @ 55	52 @ 55
B Super	48 @ 50	50 @ 52	50 @ 53	45 @ 48
C Super	35 @ 40	36 @ 42	38 @ 43	33 @ 38
Fine Combing	52 @ 57	53 @ 58	55 @ 58	56 @ 60
Medium Combing	48 @ 50	50 @ 52	50 @ 53	50 @ 54
Low Combing	43 @ 48	45 @ 48	45 @ 48	45 @ 48
California, Extra	52 @ 55	53 @ 55	54 @ 58	58 @ 62

PULLED WOOL.

Business for the quarter has been steadily good, although the supply to a certain extent has been limited, as many pullers are practically shut down during a part of the term. The stock of old wools was continuously drawn upon by spinners and combers alike and prices gradually advanced. New lambs came on the market in June and were quickly bought, the demand for B supers showing no signs of abatement. In fact, users of these wools were hard pushed to find a sufficient supply and were forced to reach out for substitutes. A's and Fine A's were also in good demand as were the various grades of combing. At no time within a term of years have pulled wools been as closely sold up to production, — a condition resulting from the reduced slaughter of sheep and also from continued activity among the woolen mills.

W. A. BLANCHARD.

JUNE 30, 1912.

FOREIGN WOOLS. (MAUGER & AVERY.)

	1912.			1911.
	April.	May.	June.	June.
Australian Combing:				
Choice	41 @ 44	41 @ 44	42 @ 45	42 @ 43
Good	39 @ 41	39 @ 41	40 @ 41	37 @ 38
Average	35 @ 36	35 @ 36	36 @ 37	33 @ 35
Australian Clothing:				
Choice	43 @ 45	43 @ 45	43 @ 45	41 @ 43
Good	40 @ 41	40 @ 41	40 @ 41	36 @ 38
Average	37 @ 39	38 @ 39	38 @ 39	34 @ 36
Sydney and Queensland:				
Good Clothing	42 @ 44	42 @ 44	42 @ 44	38 @ 40
Good Combing	41 @ 43	41 @ 43	41 @ 43	36 @ 39
Australian Crossbred:				
Choice	39 @ 41	39 @ 41	40 @ 42	39 @ 40
Average	34 @ 37	35 @ 37	35 @ 37	33 @ 36
Australian Lambs:				
Choice	42 @ 45	42 @ 45	42 @ 45	42 @ 45
Good	39 @ 40	39 @ 40	39 @ 40	39 @ 40
Good Defective	37 @ 38	37 @ 38	37 @ 38	35 @ 36
Cape of Good Hope:				
Choice	34 @ 36	34 @ 36	34 @ 36	34 @ 35
Average	31 @ 33	31 @ 33	31 @ 33	32 @ 33
Montevideo:				
Choice	34 @ 36	34 @ 36	34 @ 36	35 @ 36
Average	32 @ 33	32 @ 33	32 @ 33	33 @ 34
Crossbred, Choice	35 @ 37	35 @ 37	35 @ 37	36 @ 39
English Wools:				
Sussex Fleece	41 @ 42	41 @ 42	41 @ 42	41 @ 42
Shropshire Hogs	39 @ 40	39 @ 40	40 @ 41	40 @ 41
Yorkshire Hogs	36 @ 38	36 @ 38	36 @ 38	36 @ 38
Irish Selected Fleece	35 @ 36	35 @ 36	37 @ 38	36 @ 38
Carpet Wools:				
Scotch Highland, White	23 @ 24	23 @ 24	23 @ 24	22 @ 23
East India, 1st White Joria	31 @ 32	31 @ 32	31 @ 33	30 @ 31
East India, White Kaudahar	27 @ 29	27 @ 29	27 @ 29	26 @ 27
Donskoi, Washed, White	34 @ 35	34 @ 35	34 @ 36	32 @ 33
Aleppo, White	34 @ 35	34 @ 36	34 @ 36	32 @ 34
China Ball, White	24 @ 26	24 @ 26	24 @ 26	22 @ 23
“ “ No. 1, Open	23 @ 24	23 @ 24	23 @ 24	19 @ 21
“ “ No. 2, Open	16 @ 18	16 @ 18	16 @ 18	13 @ 14

FOREIGN WOOLS.

Crossbred wools have been in best demand. Supplies have gone freely into consumption and the supply has been replenished by liberal purchases in London and elsewhere.

Fine wools have met with more inquiry and supplies are greatly reduced, but European values are so high relatively that dealers have hesitated, in view of early tariff changes, about importing wools costing so much above prices of domestic wools.

The indications are that supplies of Buenos Ayres and Australian wools will be smaller the coming season.

Carpet wools are closely competed for, both here and abroad. Manufacturers are not supposed to be heavily stocked with wool and the general conditions are favorable for business, but the political situation dominates the wool question.

JUNE 30, 1912.

BULLETIN

OF THE

National Association of Wool Manufacturers

A QUARTERLY MAGAZINE

DEVOTED TO THE INTERESTS OF THE NATIONAL WOOL INDUSTRY.

VOL. XLII.]

BOSTON, DECEMBER, 1912.

[No. IV.

ANNUAL WOOL REVIEW

WITH ESTIMATE OF DOMESTIC WOOL CLIP OF 1912
AND OTHER STATISTICAL TABLES.

IN the pages which follow we present for the twenty-fourth consecutive year our annual estimate of the domestic wool product based upon the number of sheep fit for shearing April 1, 1912, together with numerous tables relating to sheep in various countries, the wool product, and the manufactures of wool and their importation. We have followed our accustomed lines in gathering information, and we desire to acknowledge our indebtedness for valuable assistance to sheepmen and others who have responded to our inquiries with helpful answers. We have no purpose to serve except to secure the most accurate information possible under prevailing conditions; and in this effort we have given due consideration to the views of the best informed wool growers, wool buyers, and dealers, and to the reports of officials in States where sheep are assessed for taxation.

The year 1912 marked an improvement on 1911 in briskness of trade and values realized. This improvement set in early in the year, or indeed began before the year 1911 ended. A favorable factor at that time was the report of the Tariff Board, emphasizing the need of protection for the American wool manufacture. A distinct gain in the wool and woolen trade was noted immediately afterward. In January healthy conditions in the wool mar-

ket became pronounced. For a time the strike at Lawrence, affecting very large worsted mills, was an unfavorable influence. But this trouble, after all, involved only a fraction of the American worsted machinery. Throughout January and February the wool market at Boston continued firm, the belief gaining ground that the new clip would be marked by higher prices if anything. Not even the threatening talk of the politicians in Congress could retard trade or depress prices.

In the West in the early spring growers were very sanguine in their expectations. A considerable quantity of Western wool was contracted for on the sheep's back—a practice which did not seem to be discouraged by the approaching reintroduction of the Underwood wool and woolen bill. The wool market was holding strong abroad, and the machinery of the mills was running as fully as possible with the scant supply of labor. New Western wools in April and May were bringing a very satisfactory range of prices.

Throughout May there were heavy purchases of wools in the Boston market, for the mills, impressed with the uncertainty of the situation through the year before, had not kept stocked up in advance, as was their previous habit. Meanwhile, their business had become active and they were forced into the market for immediate supplies of their indispensable material. Another factor of stress in the wool market at this time was the slow arrival of Western wool, due to delay in shearing and unfavorable weather.

June brought an unmistakable tendency toward a higher level of wool prices, 20 cents or better being paid for average medium wools in Montana and Wyoming. All this time the demand for wool was strong abroad, and prices were rising in Australia as well as in the United States. These higher values compelled the mills to announce increased prices in turn, based on the higher cost of the raw material.

The Underwood wool and woolen bill, providing for a duty of 20 per cent ad valorem on raw wool, 40 per cent on cloths and 45 per cent on dress goods, was passed on April 1 by the House of Representatives and adversely reported on May 23 to the Senate. Two months later, on July 25, the Underwood bill was called up in the Senate for consideration. After some maneuvering the La Follette bill of the year before, providing for a duty of 35 per cent on clothing and 10 per cent on carpet wools and

of 55 per cent on cloths and dress goods, was substituted in the Senate for the Underwood bill. A conference with the House was ordered and a compromise measure identical with that of the year before, providing for a duty of 29 per cent on raw wool and of 49 per cent on goods, was adopted by both houses, only to encounter the prompt and emphatic veto of President Taft, who denounced the measure as altogether non-protective. "Most of the rates in the submitted bill," said the President, "are so low in themselves that if enacted into law the inevitable result would be irretrievable injury to the wool growing industry, the enforced idleness of much of our wool combing and spinning machinery and of thousands of looms, and the consequent throwing out of employment of thousands of workmen."

President Taft's veto message bore date of August 9. It was overridden in the House but was sustained in the Senate, falling far short there of the requisite two-thirds majority. The wool market, which had shown some nervousness while the proposed legislation was being finally considered by Senate and House, took on renewed activity. Sales became very large. The goods market improved and Western growers who had been holding back their wool succeeded in securing substantially the prices they had hoped for. This buoyant tone of both the wool and the goods market continued through the remainder of the year. Conditions were healthy and strong, and the aggregate amount of business recalled the very best years of the industry. There was large buying of wool within the fortnight preceding the Presidential election. This represented purchases to fill immediate demands. Manufacturers were not discounting the future. They were simply buying the material which they required to produce goods ordered for the promptest possible delivery. The year had emphasized again the close interdependence between wool growing and wool manufacturing in the United States. The previous year of 1911 had been an unsatisfactory one for the manufacturers, and the wool market had lagged. Meanwhile stocks of goods on hand had become perilously reduced. Merchants and clothing manufacturers did not place their orders for fabrics in large quantities, but their buying was steady and constant, and very soon the machinery of the mills was again fully employed. The good trade of the year 1912 is to be explained by the great consuming power of the American people, brought

to bear on a market at the beginning almost bare of woolen goods. All that has been accomplished in the year is to supply the demand from month to month. No surplus stocks of goods have been accumulated as a general rule, so that in spite of politics the new year should open with the wool market in a reasonably strong position, scarcely ever before so bare of wool in the hands of either dealers or manufacturers. However, no repetition of the good trade of 1912 can be anticipated, for tariff revision downward is not far remote, and this menace will become very grave and imminent as the spring months are approaching.

THE NUMBER OF SHEEP.

We place the number of sheep fit for shearing, as shown in Table I., at 38,481,000, a decrease of 1,280,000 from 1911, when the total was set at 39,761,000.

Of this decrease 675,000 is in the Western group of States, where the winter caused many severe losses in the flocks; 555,000 in the Eastern section of the country, where other branches of farm industry are found less arduous or more profitable than sheep raising, and 50,000 in the Southern group of States. There is no doubt that tariff agitation and the fear of a radical reduction in the duties on wool have operated to send many sheep to the shambles. The high prices prevailing for meat of all kinds have likewise had some influence in leading sheep owners to dispose of the less profitable members of their flocks, and also of many lambs whose loss will be felt in the future both in the building up of the flocks and in the depleted wool product consequent upon the continually decreasing number of sheep.

THE WOOL PRODUCT OF 1912.

Our estimate for the total clip, exclusive of pulled wool, for the present year is 262,543,400 pounds, a decrease of 14,504,500 pounds from our last year's estimate. The scoured equivalent is 106,566,652 pounds, a decrease of 3,029,543 pounds from last year.

Late official returns from Oregon indicate that the number of sheep and the wool product of that State have been underestimated, and consequently the figures given are larger than those of a year ago; otherwise both of these items would show a greater decrease than appears in the figures of totals.

TABLE I. WOOL PRODUCT OF THE UNITED STATES. — 1912.

States and Territories.	Quality.	National Association's Estimate, Number of Sheep of Shearing Age, April 1, 1912.	Average Weight of Fleece, 1912.	Wool Washed and Unwashed, 1912.	Per cent of Shrinkage, 1912.	Equivalent Quantity of Scoured Wool, 1912.	Average Value per Scoured Pound, Oct. 1.			Total Value, 1912.	States and Territories.
							1910.	1911.	1912.		
			<i>Pounds.</i>	<i>Pounds.</i>		<i>Pounds.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>		
Maine.....	10% fine, 90% medium	160,000	6.25	937,500	42	543,750	45	40	51	\$277,313	Maine.
New Hampshire.....	25% fine, 75% medium	33,000	6.50	214,500	48	111,540	49	46	53	59,116	New Hampshire.
Vermont.....	20% " 80% "	30,000	6.75	507,500	50	338,750	49	44	54	164,022	Vermont.
Massachusetts.....	Medium.....	23,000	6.25	143,750	42	83,375	45	42	52	43,353	Massachusetts.
Rhode Island.....	"	5,000	6.00	30,000	42	17,400	45	42	52	9,048	Rhode Island.
Connecticut.....	"	15,000	5.70	85,500	42	49,590	45	43	53	26,488	Connecticut.
New York.....	33% fine, 67% medium	625,000	6.00	3,750,000	48	1,950,000	50	45	52	1,014,000	New York.
New Jersey.....	Medium.....	17,000	5.40	91,800	45	50,490	46	48	52	26,283	New Jersey.
Pennsylvania.....	60% fine, 40% medium	650,000	6.30	4,065,000	47	2,170,350	50	45	54	1,171,989	Pennsylvania.
Delaware.....	Medium.....	5,000	5.30	26,500	44	14,840	46	40	53	7,865	Delaware.
Maryland.....	"	128,000	5.70	729,600	44	408,570	45	42	53	216,545	Maryland.
West Virginia.....	75% fine, 25% medium	575,000	5.50	3,162,500	48	1,644,500	57	51	56	920,920	West Virginia.
Kentucky.....	Medium.....	775,000	4.60	3,565,000	37	2,245,950	46	43	53	1,190,354	Kentucky.
Ohio.....	60% fine, 40% medium	2,700,000	6.25	16,875,000	49	8,505,250	55	47	54	4,647,375	Ohio.
Michigan.....	25% " 75% "	1,500,000	6.75	10,125,000	48	5,345,000	49	45	52	2,737,800	Michigan.
Indiana.....	15% " 85% "	825,000	6.40	5,280,000	45	2,904,000	46	44	52	1,510,080	Indiana.
Illinois.....	25% " 75% "	675,000	6.75	4,556,250	47	2,414,813	46	43	51	1,231,555	Illinois.
Wisconsin.....	20% " 80% "	650,000	6.60	4,290,000	46	2,316,600	42	40	53	1,227,798	Wisconsin.
Minnesota.....	20% " 80% "	450,000	6.75	3,037,500	47	1,609,875	42	40	50	804,938	Minnesota.
Iowa.....	30% " 70% "	850,000	6.75	5,737,500	48	2,983,500	46	43	54	1,612,090	Iowa.
Missouri.....	15% " 85% "	1,100,000	6.75	7,425,000	45	4,083,750	45	39	53	2,164,888	Missouri.
		11,841,000	6.41	74,765,400	46.8	39,777,899				\$21,263,070	
Virginia.....	Medium.....	460,000	4.60	2,095,000	36	1,296,000	47	45	56	\$725,760	Virginia.
North Carolina.....	"	150,000	3.75	632,600	42	326,250	42	41	56	158,600	North Carolina.
South Carolina.....	"	30,000	3.60	108,000	42	62,640	41	40	50	31,320	South Carolina.
Georgia.....	"	175,000	3.75	656,250	43	374,063	41	40	53	198,253	Georgia.
Florida.....	"	35,000	3.25	308,750	38	191,425	41	40	50	95,713	Florida.
Alabama.....	"	115,000	3.25	373,750	38	231,725	41	40	50	115,863	Alabama.
Mississippi.....	"	150,000	3.75	562,500	39	343,250	41	40	53	169,125	Mississippi.
Louisiana.....	"	140,000	4.00	560,000	39	320,250	41	40	50	169,125	Louisiana.
Arkansas.....	"	100,000	4.00	400,000	40	240,000	40	40	49	117,600	Arkansas.
Tennessee.....	"	475,000	4.00	1,900,000	40	1,140,000	43	42	53	604,200	Tennessee.
		1,880,000	3.96	7,421,750	39	4,526,478				\$2,376,997	
Kansas.....	Fine, fine med., and medium	225,000	7.00	1,575,000	65	551,250	52	50	57	\$314,213	Kansas.
Nebraska.....	" " "	275,000	6.40	1,760,000	62	668,800	52	50	57	381,216	Nebraska.
South Dakota.....	" " "	475,000	6.75	3,206,250	62	1,218,375	54	52	57	694,474	South Dakota.
North Dakota.....	" " "	250,000	7.00	1,750,000	60	700,000	54	52	67	329,000	North Dakota.
Montana.....	" " "	430,000	7.25	31,175,000	62	11,840,000	56	54	58	6,870,970	Montana.
Wyoming.....	" " "	3,900,000	8.25	32,175,000	67	10,617,750	55	52	56	5,945,940	Wyoming.
Idaho.....	" " "	2,100,000	7.40	15,540,000	64	5,594,400	52	50	57	3,188,083	Idaho.
Washington.....	" " "	400,000	9.00	3,600,000	69	1,116,000	54	52	56	624,960	Washington.
Oregon.....	" " "	2,150,000	8.50	18,270,000	69	5,665,250	53	52	59	3,345,498	Oregon.
California.....	33% fall, 67% spring	1,700,000	7.90	11,900,000	67	4,967,000	46	42	56	2,199,120	California.
Nevada.....	Fine, fine med., and medium	825,000	6.75	5,575,000	67	1,965,750	54	50	62	1,181,565	Nevada.
Utah.....	" " "	1,750,000	6.60	11,550,000	65	4,042,500	52	50	54	2,182,950	Utah.
Colorado.....	" " "	1,200,000	6.70	8,040,000	67	2,653,200	47	45	56	1,485,792	Colorado.
Arizona.....	" " "	850,000	6.70	5,695,000	66	1,986,300	53	50	57	1,103,691	Arizona.
New Mexico.....	" " "	2,900,000	6.50	18,850,000	65	6,697,500	51	48	56	3,694,600	New Mexico.
Texas.....	25% fall, 75% spring	1,400,000	6.50	9,100,000	66	3,094,000	55	53	57	1,763,500	Texas.
Oklahoma and Indian Territory.....	Fine, fine med., and medium	60,000	6.5	390,000	67	128,700	48	46	55	70,785	Oklahoma.
		24,760,000	7.29	180,356,250	63.4	62,363,275				\$35,444,162	
Totals.....		38,481,000	6.82	262,543,400	59.3	106,568,629	51	47.7	55.4	\$59,084,229	Totals.
Pulled Wool.....				41,500,000	27	30,300,000	61.75	47.5	56	16,336,000	Pulled Wool.
Total Product, 1912.....						136,866,652	51.12	47.7		\$75,020,229	Total Product, 1912.
							22.53*	20.9*			

* Average value, unscoured.

The detailed statement, by States, of the estimated number of wool bearing sheep, weight of fleece with percentage of shrinkage of the wool as sheared, to its equivalent in scoured wool, the average value per pound for five years and the total value of this year's clip, including pulled wool, will be found in Table I. opposite.

In this table for convenience the States are arranged, as in years past, in three groups, the first embracing all those north of the Ohio River and east of the western boundary of Missouri, including Kentucky, Maryland, and West Virginia, in which the fleece wools, fine and medium, are of comparatively light weight and shrinkage; the second comprising, with the exception of Texas, the southern States, where only medium wools are grown, and the third comprising all the States west of the Missouri line, including Texas, New Mexico, and Arizona. The great bulk of the fine, fine medium, and medium wools of heavy weight and shrinkage are produced in this section.

In the first group there are 11,841,000 sheep, equal to 31 per cent of the total flock, which produced 74,765,400 pounds of wool, equal to 28.5 per cent of the whole product of 262,543,400 pounds of wool in the grease, excluding pulled wools.

In the third section are 24,760,000 sheep, or 64 per cent of the total flock, which produced 180,356,250 pounds of wool, or 68.7 per cent of the total clip. In scoured condition the wools of the first group yielded 39,777,899 pounds, or nearly 38 per cent of the total, while the third group produced 62,363,275 pounds, or nearly 59 per cent of the whole.

Pulled Wool.

We increase our estimated production of pulled wool for this year to 41,500,000 grease pounds, an excess of 500,000 pounds over our total for 1911. This increase is based upon actual returns from slaughtering centers, and is the natural consequence of the reduction in flocks on the ranges in the territorial districts. The shrinkage from the brushed to the scoured state is placed at the same figure as last year, namely, 27 per cent, which makes the scoured equivalent practically 30,300,000 pounds. This quantity may be divided as follows :

Fine and fine medium	16,700,000
Medium and coarse.....	13,600,000

312 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

These again may be subdivided into the current market grades with average values for each based on the price October 1, as follows:

	Pounds.	Value per pound, cents.	Total value.
Extra and fine A	4,000,000	62	\$2,480,000
A super	8,000,000	58	4,640,000
B super	6,000,000	52	3,120,000
C and low super.	1,500,000	40	600,000
Fine combing	5,200,000	60	3,120,000
Medium combing	3,100,000	56	1,736,000
Low combing	2,000,000	52	1,040,000
Shearlings	500,000	40	200,000
	30,300,000	Average 56-	\$16,936,000

The total wool production of the country, both sheared and pulled, is 304,043,400 pounds, or 14,504,500 pounds less than the estimated product of last year, and is equal to 136,866,652 pounds of scoured wool.

WEIGHT AND SHRINKAGE.

For a series of years the average weight and shrinkage for the whole country has been as follows:

	Average Weight.	Average Shrinkage.
	<i>Pounds.</i>	<i>Per cent.</i>
1901.....	6.33	60.6
1902.....	6.50	60.0
1903.....	6.25	60.8
1904.....	6.50	61.6
1905.....	6.56	61.3
1906.....	6.66	61.8
1907.....	6.60	60.6
1908.....	6.70	60.5
1909.....	6.80	60.9
1910.....	6.70	60.0
1911.....	6.98	60.4
1912.....	6.82	59.3

The wool came to market this year in better condition than usual, as is shown both in lighter average weight per fleece and

in the average shrinkage in cleansing, the average yield of clean wool per pound being greater than in any other year shown in the above table. For the years 1901-1911, inclusive, the average shrinkage was 60.8 per cent, which equals a yield of 39.2 pounds in the hundred. This year the similar yield equals 40.7 pounds, an increase over the average of 1.5 pounds.

VALUE OF THE CLIP.

The gross value of the wool product, both fleece and pulled, for the year, based on its scoured value in Boston in the early days of October, is as follows :

Fleece wool	\$59,084,229
Pulled wool.....	16,936,000
Total	<u>\$76,020,229</u>

This is an increase of \$9,448,892 over the corresponding value for last year, and in view of the decreased quantity of wool produced is a cause of profound satisfaction to those engaged in wool growing.

In the first group of States, as arranged in the table, the wools were worth \$21,263,070, or 36 per cent of the total value of the fleece wool. The second group produced wool to the value of \$2,376,997, or 4 per cent of the total, while in the third group the value is \$35,444,162, or 60 per cent of the whole. These ratios are essentially the same as in the preceding year, the decrease in number of pounds produced and the increased value balancing each other so far as relative proportions are concerned.

The next table (No. II.) presents a statement of the production of wool for a period of twenty-five years with the annual increase or decrease, and the one following it (No. III.) gives the production for the same period reduced to the scoured equivalent, as shown in our yearly estimates.

TABLE II.—FLEECE AND PULLED WOOL, WASHED AND IN THE GREASE.

	Product.	Decrease.	Increase.
1888..... pounds	301,876,121	293,829	.....
1889..... "	295,779,479	6,096,642	.....
1890..... "	309,474,856	.....	13,699,377
1891..... "	307,401,507	2,073,349	.....
1892..... "	333,018,405	.....	25,606,898
1893..... "	348,538,138	.....	15,519,733
1894..... "	325,210,712	23,327,426	.....
1895..... "	294,296,726	30,913,986	.....
1896..... "	272,474,708	21,822,018	.....
1897..... "	259,153,251	13,321,457	.....
1898..... "	266,720,684	.....	7,567,438
1899..... "	272,191,330	.....	5,470,646
1900..... "	288,636,621	.....	16,445,291
1901..... "	302,502,382	.....	13,865,707
1902..... "	316,341,032	.....	13,838,650
1903..... "	297,450,000	28,891,032	.....
1904..... "	291,783,032	.....	4,333,032
1905..... "	295,488,438	.....	3,705,406
1906..... "	298,715,130	.....	3,426,692
1907..... "	298,294,750	.....	948,176
1908..... "	311,138,321	.....	12,833,571
1909..... "	328,110,749	.....	16,972,428
1910..... "	321,862,750	6,747,999	.....
1911..... "	318,547,900	2,814,800	.....
1912..... "	304,043,400	14,504,500	.....

TABLE III.—SCOURED WOOL, FLEECE AND PULLED.

	Product.	Decrease.	Increase.
1888..... pounds	136,591,955	3,964,730	.....
1889..... "	134,795,350	1,796,605	.....
1890..... "	139,628,220	.....	4,832,870
1891..... "	139,326,703	301,517	.....
1892..... "	145,300,318	.....	5,973,615
1893..... "	151,103,776	.....	5,803,458
1894..... "	140,292,268	10,811,508	.....
1895..... "	125,718,690	14,573,578	.....
1896..... "	115,284,579	10,434,111	.....
1897..... "	111,365,987	3,918,592	.....
1898..... "	111,661,581	.....	295,594
1899..... "	113,958,468	.....	2,296,887
1900..... "	118,223,120	.....	4,264,652
1901..... "	126,814,690	.....	8,591,570
1902..... "	137,912,085	.....	11,097,395
1903..... "	124,366,405	13,545,680	.....
1904..... "	123,935,147	431,258	.....
1905..... "	126,527,121	.....	2,591,974
1906..... "	129,410,942	.....	2,883,821
1907..... "	130,359,118	.....	948,176
1908..... "	135,360,648	.....	5,001,530
1909..... "	142,223,785	.....	6,863,137
1910..... "	141,805,813	417,972	.....
1911..... "	139,896,195	1,809,618	.....
1912..... "	136,866,652	3,029,543	.....

VALUE OF THE WOOL PRODUCT FOR TWELVE YEARS.

The total value of the wool product for the year, estimated on the scoured price in Boston, October 1, was \$76,020,229 for 136,866,652 pounds of wool. Last year 139,896,195 pounds were valued at \$66,571,377. The average value per pound of the fleece wool is 55.4 cents and 56 cents for pulled wool.

	Fleece and pulled. Scoured.	Total value.	Value per pound.	
			Fleece.	Pulled.
	<i>Pounds.</i>		<i>Cents.</i>	<i>Cents.</i>
1901	126,814,690	\$51,164,709	41.1	36.7
1902	137,912,085	60,679,127	45.2	39.7
1903	124,366,405	58,775,373	48.8	43.4
1904	123,935,147	64,948,959	54.1	46.7
1905	126,527,121	80,415,514	65.4	57.4
1906	129,410,942	79,721,383	63.8	54.3
1907	130,359,118	78,263,165	62.3	50.2
1908	135,360,648	61,707,516	46.6	41.6
1909	142,223,785	88,829,746	63.6	58.0
1910	141,805,813	72,489,838	51	51.75
1911	139,896,195	66,571,337	47.7	47.5
1912	136,866,652	76,020,229	55.4	56.0

AVAILABLE SUPPLIES, 1907-1912.

Table IV. contains an estimate of the available wool supplies for the year 1912-13, that is, pending the next clip, exclusive of imports after October 1 and supplies in manufacturers' hands. The corresponding figures for a series of years are given for comparison. The table is based on the Boston Commercial Bulletin's record of supplies in dealers' hands on January 1 last, the Department of Commerce and Labor's figures of imports, and the figures of the preceding tables.

316 NATIONAL ASSOCIATION OF WOOL MANUFACTURERS.

TABLE IV. — AVAILABLE SUPPLIES.

	1907.	1908.	1909.	1910.	1911.	1912.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Wool clip, fleece and pulled . .	298,294,750	311,138,321	328,110,749	321,362,750	318,547,900	304,043,400
Domestic wool on hand January 1	94,402,046	84,556,560	50,556,100	82,841,457	142,575,200	106,128,900
Foreign wool on hand January 1	15,169,000	15,188,500	14,015,000	14,481,000	19,946,000	12,484,815
In bond January 1	40,928,806	52,955,081	37,853,497	76,503,604	52,990,238	42,004,855
Foreign wool imported, January 1 to July 1	126,600,884	64,275,513	188,125,373	139,922,432	97,434,095	134,913,297
Total . . .	575,395,486	528,113,975	618,660,719	635,111,243	631,493,433	600,575,267
Imports of wool, July 1 to Oct. 1,	33,750,260	33,205,899	62,814,168	17,807,601	26,527,408	59,011,294
Total to Oct. 1	609,145,746	561,319,874	681,474,887	652,918,844	658,020,841	659,586,561

The gross imports for the three months ending September 30, 1912, were as follows:

1912.	Class I.	Class II.	Class III.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
July	6,843,823	2,133,194	5,997,468	14,974,485.
August	10,008,860	3,210,354	11,710,799	24,925,013
September	3,299,242	2,166,160	13,646,394	19,111,796
Total	20,146,925	7,509,708	31,354,661	59,011,294

For the corresponding three months of the previous year the imports were:

Class I.	Class II.	Class III.	Total.
<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
3,236,995	2,473,183	20,817,359	26,527,537

THE ANNUAL WOOL SUPPLY.

Table V. shows the quantity of wool retained for consumption in the United States from 1890 to date. As the wool clip of the year reaches the market during the governmental fiscal year, the clip of any year is added to the imports of the fiscal year beginning July 1, so that the total supply for a series of years is accurately indicated by this combination, however it may differ from the available supplies in any one year of the series.

TABLE V.—WOOL PRODUCED, IMPORTED, EXPORTED, AND RETAINED FOR CONSUMPTION.

Fiscal Year.	Total Imports.	Exports, Domestic and Foreign.	NET IMPORTS.		Production	Retained for Consumption.	FINE WOOL.	
			Classes I. and II.	Class III.			Retained for Consumption.	Per cent of Foreign.
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	
1890-91..	129,303,648	2,930,045	36,783,501	89,882,024	309,474,856	435,848,459	345,966,435	10.63
1891-92..	148,670,652	3,210,019	53,350,167	92,312,922	307,101,507	452,562,140	360,249,218	14.81
1892-93..	172,433,838	4,310,495	46,189,082	122,026,119	333,018,405	501,141,748	379,115,629	12.18
1893-94..	55,152,585	6,497,654	7,167,380	42,007,798	348,538,138	397,193,069	355,185,271	2.02
1894-95..	206,081,890	6,622,190	98,388,318	105,402,507	325,210,712	524,722,428	419,319,921	28.46
1895-96..	230,911,473	12,972,217	126,966,355	97,918,882	294,296,726	512,235,982	414,317,100	30.64
1896-97..	350,852,026	8,700,598	235,282,735	112,141,457	272,474,708	614,626,136	502,485,908	46.84
1897-98..	132,795,302	2,625,971	47,480,033	82,810,437	259,153,251	389,322,582	306,512,145	15.50
1898-99..	76,736,209	14,095,335	3,349,870	60,947,423	266,720,684	329,361,558	268,387,135	1.25
1899-1900	155,918,455	7,912,597	44,680,424	105,525,783	272,191,330	420,197,228	314,671,445	14.20
1900-01..	103,583,505	3,790,067	32,865,844	67,127,159	288,636,621	388,430,059	321,502,465	10.10
1901-02..	166,576,966	3,227,941	69,315,286	93,842,199	302,502,382	465,851,407	371,694,390	18.65
1902-03..	177,137,796	3,511,914	54,747,533	119,397,268	316,341,032	489,966,914	370,569,646	14.63
1903-04..	173,742,834	3,182,803	55,999,545	114,880,236	287,450,000	458,010,031	345,129,795	16.22
1904-05..	249,135,746	2,561,648	134,407,321	112,292,726	291,783,032	538,357,130	426,066,402	31.54
1905-06..	201,688,668	5,642,859	98,336,137	97,902,153	295,488,438	491,534,247	393,632,094	24.99
1906-07..	203,847,545	3,446,748	91,726,655	108,888,982	298,715,130	499,115,927	390,216,945	23.50
1907-08..	125,980,524	5,626,463	57,846,442	62,690,077	298,294,750	418,648,811	346,141,192	16.71
1908-09..	266,409,304	3,523,975	164,867,536	99,046,169	311,138,321	574,023,650	476,005,877	34.60
1909-10..	263,928,232	4,055,473	139,846,192	120,074,087	328,110,749	587,983,508	467,909,421	29.90
1910-11..	137,647,641	8,205,699	45,414,054	84,027,888	321,362,750	450,804,692	366,776,804	12.38
1911-12..	193,400,713	1,719,870	85,531,845	106,148,998	318,547,900	510,228,743	404,078,545	21.12
1912-13..	.....	.....	.....	.....	304,043,400	.....	.....	.....

The proportion of foreign fine wools increased from 12.38 per cent in 1911 to 21.12 per cent in the present year, owing to the greater importation of Class I wools, which increased from 137,646,641 pounds in 1910-11 to 193,400,713 pounds in the fiscal year ending June 30, 1912. The total quantity of fine wools retained for consumption, both foreign and domestic, amounted to 404,078,845 pounds, an increase of 59,424,051 pounds over the preceding year. This total is practically the same as the average

quantity of such wools retained for consumption in the preceding five years.

The net imports of Class I and II wools are 40 millions of pounds greater than in the preceding year, and a little less than two-thirds as great as in 1909-10. In fact, the net imports of these wools in the two last years do not equal by 9 millions of pounds the imports of that year, which, except for the year immediately preceding it, is credited with the largest imports since the extraordinary year 1896-7, when they were abnormally large in anticipation of the taking effect of the Dingley law.

The following table, computed from Table V., shows the total and average annual supplies for five-year periods, beginning in 1888, the ten years 1888-1897, 1893-1902, and 1903-1912, the five-year periods, 1903-1907, 1908-1912, and the years 1908, 1909, 1910, 1911 and 1912:

TABLE VI. — WOOL SUPPLY, 1888-1912. — DOMESTIC PRODUCTION AND IMPORTS LESS EXPORTS.

Fiscal years ending June 30.	All wools.	Fine wools.
	<i>Pounds.</i>	<i>Pounds.</i>
1888-1892. Five years, total.....	2,122,407,842	1,686,818,840
Annual average.....	424,481,568	337,363,768
1893-1897. Five years, total.....	2,549,920,592	2,070,423,829
Annual average.....	509,984,118	414,084,766
1888-1897. Ten years, total.....	4,672,328,434	3,757,242,669
Annual average.....	467,232,843	375,724,267
1898-1902. Five years, total.....	1,988,771,621	1,582,374,537
Annual average.....	397,755,324	316,474,907
1893-1902. Ten years, total.....	4,538,692,213	3,652,798,366
Annual average.....	453,869,221	365,279,837
1903-1907. Five years, total.....	2,476,984,249	1,925,618,882
Annual average, five years.....	495,396,850	385,123,776
1908-1912. Five years, total.....	2,544,389,404	2,063,612,139
Annual average.....	508,877,880	414,722,427
1903-1912. Ten years, total.....	5,021,373,653	3,989,231,021
Annual average, ten years.....	502,137,365	398,923,102
1908.....	418,648,811	346,141,192
1909.....	574,023,651	476,005,877
1910.....	587,983,028	467,909,421
1911.....	450,804,692	366,776,804
1912.....	512,928,743	406,778,845

SLAUGHTER AND MOVEMENT OF SHEEP.

The total number of sheep killed yearly at four western centers, Chicago, Kansas City, St. Louis, and Omaha, and total yearly receipts of sheep at eastern seaboard markets, Boston, New York, Philadelphia and Baltimore, are reported in the "Cincinnati Price Current's Statistical Annual," as follows :

TABLE VII. — SEABOARD SHEEP RECEIPTS, AND SLAUGHTER AT PRINCIPAL WESTERN POINTS.

Calendar Year.	Western killings.	Seaboard receipts.	Total.
1887.....	1,173,000	3,432,000	4,605,000
1888.....	1,275,000	3,453,000	4,728,000
1889.....	1,476,000	3,305,000	4,781,000
1890.....	1,622,000	3,274,000	4,896,000
1891.....	1,879,000	3,375,000	5,254,000
1892.....	2,112,000	3,394,000	5,506,000
1893.....	3,278,000	3,330,000	6,608,000
1894.....	3,565,000	4,079,000	7,644,000
1895.....	3,995,000	4,265,000	8,260,000
1896.....	4,299,000	3,611,000	7,910,000
1897.....	4,654,000	3,141,000	7,795,000
1898.....	4,647,000	2,988,000	7,635,000
1899.....	5,019,000	2,945,000	7,964,000
1900.....	4,798,000	3,093,000	7,891,000
1901.....	5,276,000	3,400,000	8,676,000
1902.....	5,832,000	3,443,000	9,275,000
1903.....	5,827,000	3,314,000	9,141,000
1904.....	5,465,000	3,128,000	8,593,000
1905.....	5,879,000	2,425,000	8,304,000
1906.....	6,117,000	2,606,000	8,723,000
1907.....	5,701,000	2,956,431	8,657,431
1908.....	5,824,000	3,364,349	9,188,349
1909.....	6,578,000	3,346,147	9,924,147
1910.....	6,911,000	3,173,706	10,084,706
1911.....	8,295,000	3,244,000	11,539,000

The western killings and the seaboard receipts are gradually increasing, as is to be expected because of improved business methods, the growth of population at the same time increasing the demand for meat. The increase this year is 1,455,000 head and the total 11,539,000.

While the table above accounts for a large part of the sheep annually killed for food purposes, there is also a very large number slaughtered in local establishments, by country butchers and by farmers for their own consumption, of which no account

can be secured. There can be no doubt but that the actual number must be at least 15,000,000 head of sheep and lambs.

THE COURSE OF PRICES.

Tariff agitation, which was the bane of the wool business in 1911, is responsible for much of the uncertainty existing in the wool market throughout the year. It is true that many believed that the discordant elements in Congress could never agree upon a tariff bill on wool and its manufactures, while others felt confident that should an agreement be reached and a bill adopted by both houses President Taft would interpose his veto and thus prevent the enactment of any new law. Nevertheless much uncertainty existed, accompanied by a feeling of hope that in the end the situation would be saved and disaster to the industry deferred if not entirely prevented.

The statistical position of wool was strong. Reduced clips were apparent in Australia and Argentina, and it early became evident that the American clip would fall short of that of last year by many millions of pounds. At the same time, the larger consumers felt emboldened to enter the market and secure enough of the raw material to supply their wants for months in advance. Smaller mills were encouraged by this action and, compelled by force of circumstances, secured supplies sufficient for their prospective wants. Many establishments, however, have pursued during the year a hand-to-mouth policy, buying only what they could see a use for in the near future. The result is that not in many years has the wool clip passed so completely out of first hands, nor in many years have the wool lofts been so bare of stocks held by producers and merchants.

The tendency of prices during the year has been generally upward, and at its close wool values are on the average 17 per cent higher than a year earlier.

Table VIII. shows the Boston prices of domestic wools in October for fifteen years, during which the tariff on wool and woolens has been practically unchanged. The relative prices are shown in the table, and are graphically indicated by the chart of fluctuations in wool prices opposite this page.

FLUCTUATIONS IN WOOL PRICES,

DOMESTIC AND FOREIGN, 1890-1912,

MCKINLEY TARIFF OCTOBER 1, 1890, TO AUGUST 27, 1894; GORMAN-WILSON LAW AUGUST 27, 1894, TO JULY 24, 1897.

(WOOL DUTY REMOVED UNDER THE GORMAN-WILSON LAW AUGUST 27, 1894, AND THE REDUCED DUTIES ON MANUFACTURES OF WOOL TOOK EFFECT JANUARY 1, 1895.)

DINGLEY TARIFF JULY 24, 1897, TO OCTOBER 5, 1909; ALDRICH-PAYNE TARIFF OCTOBER 5, 1909, TO DATE.

PUBLISHED BY THE NATIONAL ASSOCIATION OF WOOL MANUFACTURERS, BOSTON, MASS., U. S. A.

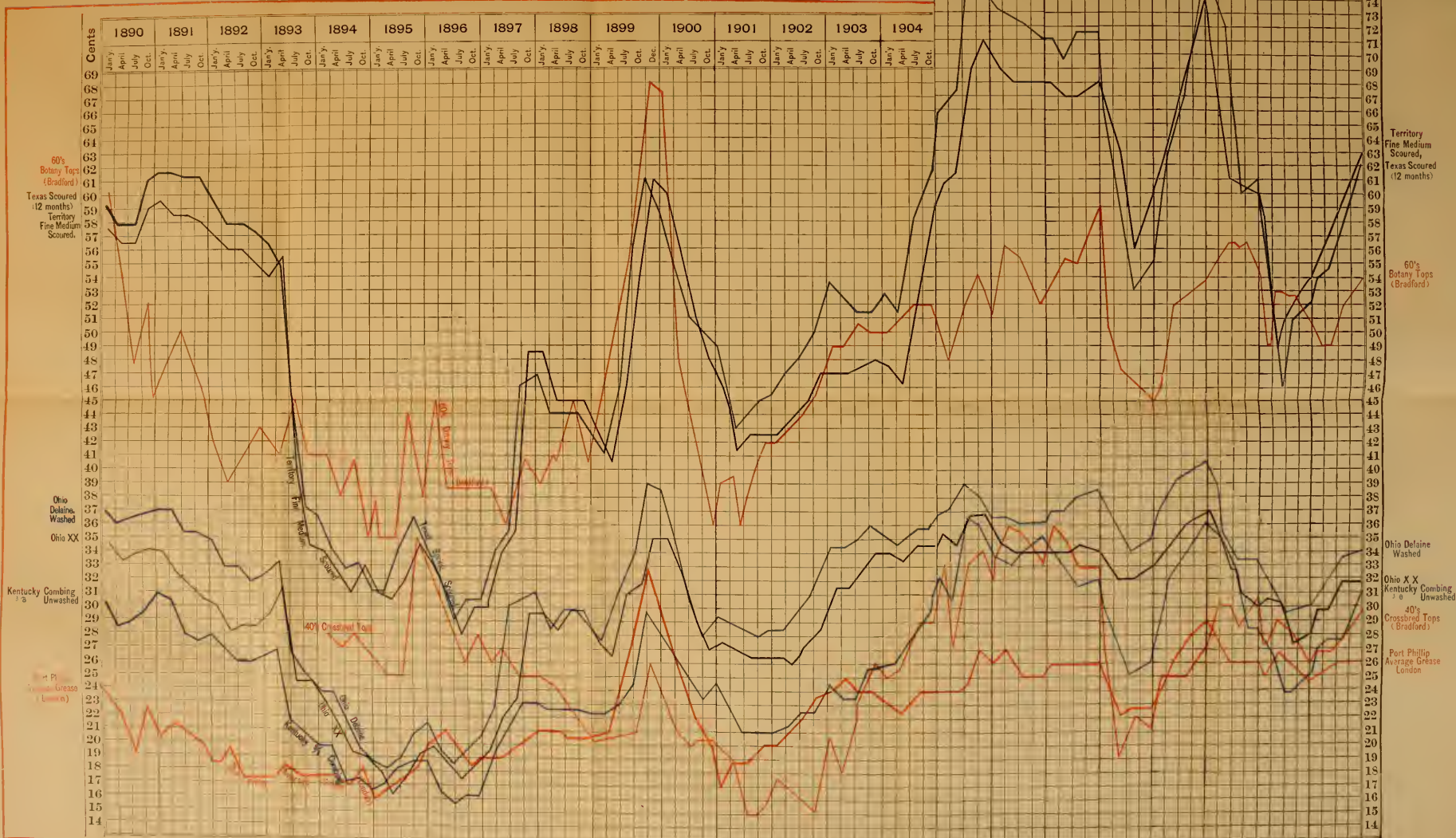


TABLE VIII. — COMPARATIVE PRICES OF DOMESTIC WOOL IN BOSTON,
OCTOBER, 1898-1912.

	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.															
<i>(Washed.)</i>															
XX and above . . .	29½	31½	28½	26½	28½	34	35	36½	34	34	33	36	30	28	31
Medium	30	34½	28½	26	29	32	36	41½	40	40	34	40	34	31	37
Fine Delaine	29½	34½	28½	28	31½	36	36	37½	36	38½	35	40	34	30	24
<i>(Unwashed.)</i>															
Fine	19½	22½	18½	19½	21½	23½	24	27	26	27	23	28	22	20	23
Medium	22½	25	23½	20	23	25	30	34½	33	33	26	36	28	25	30
Fine Delaine	21½	24½	21½	21	24	26	27	30	28	31	28	33	26	24	28
MICHIGAN, WISCONSIN, NEW YORK, ETC.															
<i>(Washed.)</i>															
Fine	22½	25½	22½	20½	24	27½	27½	31*	30*	30*	28*	31*	28*	*	*
Medium	27½	32	27½	24½	27	31	33	40	39	39	33	38	33	30	36
Fine Delaine	27½	31½	25½	24½	29	34	34	36	34	37	34	38	32	28	33
<i>(Unwashed.)</i>															
Fine	17½	20	16½	17	19	21½	22	25	24	25½	22	26	20	18	22
Medium	22	22½	22½	19½	21½	24	29	33	32	32	25	34	27	24	29
Fine Delaine	19½	22½	18½	19	22	23½	25	28	26	29	26	32	25	22	26
KENTUCKY AND INDIANA.															
<i>(Unwashed.)</i>															
Medium	22½	22½	24½	21	22½	24½	30	35	33	31	25	35	28	25	31
MISSOURI, IOWA, AND ILLINOIS.															
<i>(Unwashed.)</i>															
Medium	21½	22	22½	19½	21½	23½	29	34	32	30	24	32	26	23	28
TEXAS.															
<i>(Scoured Basis.)</i>															
Spring, fine, 12 months	44	49	50	44	52½	52½	62	75	70	71	55	75	60	52	62
Fall, fine	41½	44	41	37	45	42½	62	62	58	58	45	60	44	40	50
CALIFORNIA.															
<i>(Scoured Basis.)</i>															
Spring, Northern, free, 12 months . .	44	49	49	43½	50	52	62	74	70	65	50	70	55	48	54
Fall, free	41	44	41	38½	43	42½	53	62	60	58	40	53	45	40	45
TERRITORY WOOL, IN- CLUDING MONTANA, WYOMING, UTAH, IDAHO, OREGON, ETC.															
<i>(Scoured Basis.)</i>															
Staple fine	47½	55	51	46	55	55	65	76	71	73	60	78	65	60	67
" medium	45	50	48	44	50	51	60	70	66	68	52	70	57	52	60
Clothing, fine	45	50	48	43	48	50	60	72	68	65	53	70	58	50	60
" medium	44	48	47½	40	45	46	55	68	63	60	45	65	50	45	56

* Nominal.

THE ANGORA GOAT AND MOHAIR.

The raising of mohair for the market is an industry of comparatively recent introduction into this country, although much has been written about the merits of the Angora goat which produces it and much has been said of the usefulness of the fiber for manufacturing purposes. The first Secretary of the National Association, Dr. John L. Hayes, in a book entitled, "The Angora Goat," published in 1882, was one of the earliest writers to call attention to the adaptation of this animal to the United States. Early efforts to foster the industry met with

indifferent success, largely because there was but little call for the fleece among our manufacturers. Even to-day the number who make use of it is comparatively limited, being confined almost exclusively to the manufacturers of plushes and certain classes of dress goods and linings. More recently much has been used in the manufacture of automobile tops and occasionally the hair is used in connection with wool in the making of felts and hats, but the latter uses are spasmodic and result from certain demands of fashion.

The States producing the most mohair are Arizona, New Mexico, Texas, California, and Oregon.

In the three first named and in southern California the goats are sheared both in the spring and fall, as is customary with sheep in the same regions. The reason for this is that if the hair is allowed to grow the goats shed it and the production is in consequence much less in amount. The double shearing results in the production of a fiber of shorter length than if the fleeces were allowed a full year's growth, and averages about 5 inches for the spring and 7 inches for the fall clips. In northern California and in Oregon the hair is shorn only once in the year, and will average 8 to 9 inches in length. In quality the Oregon hair will compare favorably with the Turkish mohair in many respects, but it is not quite so soft and silky and will not, therefore, spin to so fine a count.

The United States census has not taken cognizance of the Angora goat as a distinct animal, but in its reports classes it with other goats, giving the number of goats and kids in 1900 as 1,870,599 and in 1910 as 2,915,125, an increase in the ten years of 1,015,125. The Angora goat has been found to be of great service in clearing land of brush and low growths that sheep and cattle will not touch. The meat of the kids is said to be fully equal to the best young lamb, from which it is difficult to distinguish it. The fleece, however, is the most valuable product.

In 1899, according to the Census reports, only 454,932 fleeces of goat hair were sheared, yielding 961,328 pounds of hair. Ten years later the number of fleeces had increased to 1,682,912, which gave 3,778,706 pounds of hair. As the common goat is not sheared it is fair to assume that these quantities represent the amount of mohair raised in this country so far as ascertainable by Census methods. Recent commercial estimates make the mohair product this year to be about 4,000,000 pounds, valued at \$1,240,000 based on Boston prices.

The following statement presents the above figures in tabular form :

MOHAIR PRODUCTION IN THE UNITED STATES.
U.S. Census Reports.

	Fleeces.	Weight of Mohair.	Value.
		<i>Pounds.</i>	
1900	454,932	961,328	\$267,864
1910	1,682,912	3,778,706	901,597
1912 .....	.....	4,000,000*	1,240,000†

* Commercial estimate.

† Boston market value.

BOSTON RECEIPTS AND SHIPMENTS OF WOOL.

Table IX. shows the annual receipts of domestic and foreign wool in Boston by months for the years 1905 to 1912, inclusive, and Table X. shows the shipments in pounds from Boston, by months over the several railroads and by sea for the year. Only the direction and quantity of the shipments can be determined by this table, which contains a certain amount of duplication, for it reports shipments of wool from Boston to be scoured, some of which is reshipped to Boston, to be again sent away to factories where it is used.

The receipts of domestic wool in Boston up to November 1 were 929,992 bales and bags, containing 218,292,147 pounds of wool. During the same period the receipts of foreign wool amounted to 285,361 bales, equal to 115,384,756 pounds. In the corresponding period of ten months in the previous year the domestic receipts were 830,476 bales, 204,933,413 pounds, and 147,429 bales, 60,898,806 pounds, of foreign.

The total receipts of foreign and domestic wool for the ten months of 1912, as shown by Table IX., amounted to 333,676,903 pounds, as against 204,933,413 pounds in the corresponding ten months of the preceding year, an increase of receipts of 128,743,-490 pounds. The shipments from Boston in the corresponding ten months amounted to 238,618,739 pounds in 1912 and 176,-604,184 pounds in 1911, an increase of shipments of 62,014,555 pounds in the ten months.

The difference between the receipts and shipments, 95,058,164 pounds, indicates the quantity of wool stored in Boston, except so far as the amount is affected by the shipment of wool in store here January 1, 1912. Such shipments would operate to increase the quantity of this year's wool on hand at the close of October.

TABLE IX. — RECEIPTS OF WOOL IN BOSTON IN BALES AND BAGS, 1906-1912.
(*Boston Chamber of Commerce, James A. McKibben, Secretary.*)

	1906.		1907.		1908.		1909.		1910.		1911.		1912.	
	Domestic.	Foreign.	Domestic.	Foreign.	Domestic.	Foreign.	Domestic.	Foreign.	Domestic.	Foreign.	Domestic.	Foreign.	Domestic.	Foreign.
January	32,869	14,584	38,242	19,893	25,633	12,976	40,983	21,670	36,169	27,323	59,785	13,039	61,473	15,927
February	22,641	33,263	30,997	40,123	23,244	19,654	37,530	53,418	24,724	60,811	46,448	37,221	62,178	33,716
March	29,760	31,332	28,276	38,971	24,658	8,579	34,274	51,137	28,581	37,849	40,301	18,001	42,632	36,975
April	27,536	33,424	29,192	24,271	22,791	15,671	43,946	55,005	22,775	25,085	57,237	23,647	42,879	29,754
May	35,810	16,439	37,714	28,059	33,005	14,141	78,955	40,871	38,748	9,207	63,461	10,508	72,883	37,964
June	64,274	11,250	64,613	21,936	69,295	13,073	114,834	39,455	48,074	7,954	101,203	7,655	96,333	15,915
July	113,505	5,113	125,043	7,038	148,740	8,617	228,732	13,303	118,726	3,123	189,980	5,765	218,658	19,474
August	113,219	13,842	154,637	18,558	156,747	17,662	142,493	33,974	188,599	10,106	163,502	11,503	205,327	45,493
September ..	60,088	8,086	55,385	15,472	62,565	7,957	70,492	26,975	80,745	6,885	70,804	7,210	86,906	24,695
October	35,352	12,854	42,468	9,636	46,106	15,570	47,832	23,237	62,111	5,376	57,755	12,880	65,382	25,748
November	27,796	14,160	40,172	6,030	53,918	10,669	38,050	18,305	61,711	6,171	65,382	8,202	50,823	25,748
December ...	32,041	14,991	20,244	4,180	56,489	23,480	43,882	16,753	61,569	12,342	64,404	10,619		
Total	594,892	209,358	666,988	234,167	723,191	167,149	921,973	394,103	782,419	202,232	960,262	166,250	929,992	285,361
Weight in pounds ...	166,671,466	106,781,301	185,879,807	96,212,199	190,470,231	76,097,317	247,463,739	149,487,123	195,536,835	81,173,849	247,463,739	149,487,123	218,292,147	115,384,756

TABLE X. — SHIPMENTS OF WOOL FROM BOSTON BY MONTHS.
(*Boston Chamber of Commerce, James A. McKibben, Secretary.*)

RAILROADS.	1911.		1912.												Total 10 months. Since Jan. 1, 1912.							
	November.	Pounds.	January.	Pounds.	February.	Pounds.	March.	Pounds.	April.	Pounds.	May.	Pounds.	June.	Pounds.		July.	Pounds.	August.	Pounds.	September.	Pounds.	October.	Pounds.
Boston & Albany R.R.:																						
Boston & Albany	3,253,480		4,151,983		3,036,160		2,331,243		3,506,973		4,080,278		3,411,941		3,801,948		3,574,596		3,553,166		3,608,736	
Grand Junction	350,000		1,071,350		692,810		1,062,670		1,441,440		1,391,915		1,165,416		528,400		2,546,256		2,026,340		724,260	
New York, New Haven & Hartford R.R.:																						
Boston & Maine	3,844,190		3,621,930		5,111,290		4,157,900		2,660,480		4,834,340		3,514,400		3,729,820		3,744,750		4,046,390		3,620,810	
Boston & Maine R.R.:																						
Eastern & Western	5,069,000		4,949,000		6,680,500		3,088,500		4,279,000		6,500,000		4,797,000		5,820,000		6,622,930		5,994,000		4,334,690	
Portland Div. . .																						
Southern Div. . .																						
Minor St. Div. . .																						
Fitchburg Div. . .																						
Warren Bridge Division.	726,514		1,033,966		683,960		825,215		987,580		690,639		1,489,220		1,101,331		1,006,397		974,984		882,742	
Mystic Wharf Storehouse *.	2,127,570		2,040,010		2,504,885		1,156,660		1,409,610		3,687,385		2,703,396		2,090,647		1,348,295		2,264,231		1,775,400	
By sea	1,244,218		1,143,700		3,274,370		1,801,450		1,375,410		2,735,670		1,941,395		1,613,083		1,744,280		1,473,080		2,932,342	
Total	19,533,845		21,101,694		28,670,614		23,778,625		19,131,253		29,773,967		22,907,278		23,363,799		25,802,524		25,471,181		22,625,500	
Total after January 1	196,138,029		217,239,723		28,670,614		62,449,239		88,654,490		118,428,457		141,355,735		164,719,634		190,522,058		215,993,239		238,618,739	
Total after January 1 preceding year	201,559,534		217,761,880		18,827,857		38,789,589		55,706,568		68,739,298		87,674,499		105,704,585		119,864,584		138,444,197		157,045,121	
																					176,604,184	

* Wool landed at Mystic Wharf is generally shipped out over either the Portland or Southern Divisions of the Boston & Maine Railroad.

STATISTICS OF IMPORTS OF WOOL AND WOOLENS.

We are again indebted to the Hon. A. H. Baldwin and the Hon. O. P. Austin, Chiefs of the Statistical Bureau of the Department of Commerce and Labor, for the facts relating to the imports of wool and wool manufactures for the fiscal year ending June 30, 1912, which are given in Tables XI. to XIII. inclusive, and for the table on page 402, which shows the imports entered for consumption for the fiscal years ending June 30, 1911 and 1912.

Tables XI., XII., and XIII. show the gross imports of wool both by classes and ports, as brought into the three principal wool importing centers, but as stated in the footnotes to the tables there is a moderate quantity imported each year into minor ports. The tables show a large increase in the quantity of wool imported, as compared with the preceding year. Boston retains her supremacy in the importation of Class I and II wools, receiving a total of 60,284,238 pounds, against 12,702,425 pounds in the other two ports. The imports of Class II wools, never very great in quantity, amounted this year to 18,542,996 pounds, a little more than 10 per cent of the total quantity of all wools imported. The imports of Class III wools into New York amounted to 56,040,867 pounds, a total much smaller than in some years, but still over 7,841,625 pounds in excess of the receipts of similar wools in Boston and Philadelphia. The total importation of Class III wools in these three ports amounted to 104,240,109 pounds, and of all wools, to 177,226,772 pounds.

TABLE XI. — WOOL IMPORTED INTO BOSTON, NEW YORK, AND PHILADELPHIA.
BY PORTS AND CLASSES.

GROSS IMPORTS YEAR ENDING JUNE 30.	BOSTON.			NEW YORK.			PHILADELPHIA.			TOTAL.
	Class 1.	Class 2.	Class 3.	Class 1.	Class 2.	Class 3.	Class 1.	Class 2.	Class 3.	
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	
1896.....	78,398,112	9,539,881	30,325,673	28,939,693	543,352	52,764,614	8,301,279	2,070,608	15,055,110	225,938,322
1897.....	137,221,457	23,156,843	33,421,729	48,428,014	2,371,604	62,522,561	9,884,925	1,811,398	13,676,511	332,495,042
1898.....	36,203,712	2,672,113	22,823,137	5,865,916	458,732	50,071,999	2,306,013	17,505	9,661,885	130,083,012
1899.....	8,335,942	1,554,536	12,456,404	2,911,683	155,121	43,251,114	1,517,560	344,368	4,971,888	75,498,636
1900.....	30,192,843	5,343,455	29,333,226	3,561,996	1,275,008	61,922,600	3,281,782	3,266,758	14,480,204	152,663,872
1901.....	22,416,924	3,396,580	19,963,032	5,602,497	210,782	39,112,400	2,072,551	572,304	8,171,451	101,518,521
1902.....	51,479,822	2,820,800	21,778,976	7,308,817	920,301	52,417,988	5,468,922	266,807	19,780,677	162,243,110
1903.....	37,821,884	8,877,714	35,294,573	5,323,738	1,693,694	54,119,001	4,443,990	1,991,395	29,648,574	171,994,458
1904.....	30,601,779	8,980,496	37,984,908	3,070,482	1,339,643	48,582,335	4,509,591	362,262	27,639,439	170,401,040
1905.....	86,741,441	19,018,797	37,070,260	9,908,856	2,908,801	44,082,025	11,146,872	1,569,526	30,346,375	242,792,953
1906.....	64,801,760	8,336,094	22,420,950	8,555,810	1,657,970	49,278,261	10,227,347	1,772,888	26,788,974	198,840,054
1907.....	61,116,729	4,204,364	25,713,122	8,817,037	1,159,185	61,357,911	8,744,454	854,390	22,226,390	194,194,182
1908.....	34,002,148	7,247,739	13,023,020	3,397,855	522,524	36,778,123	6,220,038	459,275	16,647,519	118,298,301
1909.....	114,512,293	11,591,627	24,757,185	11,100,437	383,908	52,853,241	12,531,238	1,852,418	24,005,373	253,587,920
1910.....	79,232,943	17,022,966	27,476,785	14,399,419	1,574,625	66,098,923	13,081,388	4,635,818	26,762,386	250,285,253
1911.....	32,689,348	5,532,189	20,117,152	1,927,443	252,927	43,540,674	2,205,818	531,663	18,818,639	125,015,853
1912.....	54,443,667	5,840,571	25,538,651	4,189,259	473,126	56,040,867	6,878,019	1,162,021	22,660,591	177,226,772

NOTE. — These figures represent about 95 per cent of the total quantity of wool imported into all the ports of the United States.

TABLE XII. — WOOL IMPORTED INTO BOSTON, NEW YORK, AND PHILADELPHIA.
BY PRINCIPAL COUNTRIES OF PRODUCTION.

YEAR ENDING JUNE 30.	Russia.	Turkey.	United Kingdom.	Argentina.	Uruguay.	Chinese Empire.	British E. Indies.	British Oceania.	All other Countries.	TOTAL.
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
1896.....	13,150,509	17,987,753	14,229,068	32,281,341	9,048,350	26,084,232	9,897,531	72,995,090	30,264,448	225,938,322
1897.....	19,706,449	20,239,717	27,759,419	64,969,556	15,004,257	21,461,478	10,989,980	109,912,851	42,451,335	332,435,042
1898.....	16,999,224	9,282,762	12,434,332	16,734,279	1,309,974	20,369,294	6,445,063	31,877,252	14,630,832	130,083,012
1899.....	13,373,350	5,697,377	9,156,634	7,957,657	149,573	14,276,134	6,949,491	7,249,740	10,688,700	75,498,636
1900.....	18,869,252	9,577,147	20,393,063	20,064,279	1,072,307	30,998,289	9,397,020	23,121,394	19,171,121	152,663,872
1901.....	13,720,814	8,355,941	16,919,793	14,358,218	783,075	9,181,105	4,146,698	22,570,030	11,482,847	101,518,521
1902.....	16,322,231	12,215,316	21,737,509	45,287,370	533,634	18,843,396	6,813,401	26,559,531	13,930,722	162,243,110
1903.....	19,455,392	15,440,933	31,778,842	23,265,309	541,384	26,032,976	11,850,446	25,238,498	18,390,678	171,994,458
1904.....	23,403,797	17,742,473	26,807,042	28,168,060	112,208	24,912,491	10,088,556	25,792,098	13,374,315	170,401,040
1905.....	23,790,451	23,454,937	25,213,450	47,695,567	7,740,309	30,023,157	12,202,135	56,212,733	16,460,214	242,792,953
1906.....	21,180,755	16,032,199	21,615,963	42,167,927	5,807,190	30,233,762	6,011,319	39,548,551	11,242,388	193,840,054
1907.....	21,231,378	15,710,735	14,863,620	23,195,208	5,856,611	39,762,115	8,697,581	52,538,582	12,338,352	194,194,182
1908.....	12,913,964	10,686,993	15,747,766	16,221,285	1,604,421	21,717,431	4,936,421	27,032,576	7,438,644	118,298,301
1909.....	7,966,392	10,050,199	31,125,711	58,379,834	5,868,232	35,634,909	12,952,758	79,420,778	12,189,107	253,587,920
1910.....	13,263,175	13,521,623	37,097,134	31,082,184	8,789,785	46,599,637	16,603,135	68,199,625	15,128,955	250,285,253
1911.....	12,944,356	9,552,982	12,854,102	17,891,376	711,525	30,055,965	10,831,635	20,494,162	9,679,750	125,015,853
1912.....	20,253,067	13,682,915	13,656,409	27,621,628	3,216,988	32,636,950	15,725,299	38,494,677	11,938,839	177,226,772

NOTE. — These figures represent about 95 per cent of the total quantity of wool imported into all ports of the United States.

COUNTRIES OF PRODUCTION AND SHIPMENT.

Table XIII. shows the countries of production and immediate shipment of wools imported into the United States during the fiscal year ending June 30, 1912. Owing to changes in method in the publication of the "Commerce and Finance Reports" by the Department of Commerce and Labor, this statement was not published in full, and has been compiled with much trouble from the "Monthly Summaries." It is to be hoped that the Department hereafter, as was formerly the custom, will print this table in connection with the June issue of the Summary.

The imports of Class I wools were nearly double in quantity those of last year, but still fell short by many millions of pounds those of recent preceding years, as appears from the following tabular statement, which covers the years 1909, 1910, 1911 and 1912, and shows at the same time the amount coming into this country from each of the principal countries of production:

	1912.	1911.	1910.	1909.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Australasia	38,186,399	20,470,121	68,094,059	79,416,776
Argentina.....	23,049,591	14,014,295	27,331,168	50,601,420
Uruguay.....	3,125,759	715,525	8,768,627	5,759,852
All other	1,149,196	1,022,668	2,519,896	2,365,920
	65,510,945	36,222,609	106,713,750	138,143,968

Our supply of Class II wools is derived principally from the British islands, which furnished 5,574,274 pounds of the 7,475,718 pounds of these wools imported during the year. The other wools classed under this head were mostly Angora goat hair, which comes from Turkey and the Cape of Good Hope, and is known as mohair, and camel, vicuna and similar hairs, the product of Asia and South America.

Class III wool comes from nearly every portion of the globe, but principally from the countries named in the subjoined statement, which covers the imports of the last three years. These wools are mostly used for the manufacture of carpets and low-grade blankets.

	1912.	1911.	1910.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Chinese Empire	32,634,956	30,049,836	46,599,637
Russia (Europe and Asia)...	20,146,464	12,943,813	13,263,175
United Kingdom.....	7,415,770	8,245,410	15,338,953
Turkey (Europe and Asia) ..	12,308,244	7,963,172	13,293,465
British East Indies	15,675,017	3,785,420	15,734,913
Argentina.....	4,572,037	10,457,555	3,713,317
Germany	2,585,971	2,128,734	1,695,166
All other	8,901,650	6,902,525	10,699,468
	104,240,109	82,476,465	120,338,094

TABLE XIII. — WOOL IMPORTED INTO BOSTON, NEW YORK, AND PHILADELPHIA, FISCAL YEAR ENDING JUNE 30, 1912, BY COUNTRIES OF PRODUCTION, IMMEDIATE SHIPMENT, AND CLASSES.

Compiled from Commerce and Finance Reports.

COUNTRIES OF PRODUCTION.	Countries of immediate shipment.	CLASSIFICATION.			TOTAL.
		Class 1.	Class 2.	Class 3.	
		Pounds.	Pounds.	Pounds.	Pounds.
Austria-Hungary	Austria-Hungary	431,527			481,720
Belgium	England	50,193			
Denmark	Belgium	335			
France	Denmark	314,808			314,808
	France	961		3,764,705	3,765,666
Iceland	Iceland	147,428			1,297,135
	Denmark	1,071,835			
	Sweden	35,823			
	England	42,049			
Germany	Germany	47,811	110	2,585,971	2,633,892
Greece	Greece			30,472	30,472
Italy	Italy	50	210	48,738	48,998
Netherlands	Netherlands		1,423	1,320	2,743
Norway	Norway			42,693	42,693
Portugal	Portugal			614,800	792,081
	England			176,880	
	Spain			401	
	Russia in Europe		3,677	11,040,447	11,575,614
	Turkey in Europe			28,832	
	Denmark			92,719	
	Germany			46,659	
Russia in Europe	Belgium			23,062	16,839
	England		102,926	217,676	
	France			19,616	
	Germany			11,386	
Servia	Austria-Hungary			5,453	622,388
	Spain			258,167	
	Belgium			89,987	
Spain	England			36,222	
	France			36,791	3,074,813
	Portugal			201,221	
	Turkey in Europe		1,301,384	1,503,466	
	England			246,916	
Turkey in Europe	France			14,044	6,752,269
	Italy		3,003		
	Greece			6,000	
	England	756,411	4,709,983	1,164,996	
England	Scotland		120,879		6,675,644
	Scotland		476,649	5,305,898	
Scotland	England		2,215	890,862	
	Ireland		5,788		
Ireland	England	5,246	162,048	54,014	15,725,299
	Austria-Hungary		2,500		
	British East Indies			4,440,606	
	England	32,837	17,445	11,190,514	
British East Indies	Germany			5,704	32,636,950
	Scotland			35,265	
	Canada			2,928	
	China	260		32,050,417	
China	England		1,734	572,799	8,677,453
	Russia in Europe			9,381	
	Germany			2,359	
	Russia in Asia			6,032,342	
Russia in Asia	Russia in Europe			2,644,427	860,993
	France			684	
	Persia			346,425	
	Turkey in Asia			98,511	
Persia	France			119,970	10,608,102
	Russia in Europe			9,234	
	England			286,853	
	Turkey in Asia		19,607	7,682,105	
	England		982	1,555,390	10,608,102
	Denmark		19,593		
	France			1,034,724	
Turkey in Asia	Austria-Hungary			84,426	
	Germany			47,733	13,320
	Turkey in Europe		30,102	120,110	
	Belgium			13,320	

TABLE XIII. — *Continued.*

COUNTRIES OF PRODUCTION.	Countries of immediate shipment.	CLASSIFICATION.			TOTAL.
		Class 1.	Class 2.	Class 3.	
		<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
British South Africa,	British South Africa,		2,191	190,142	629,729
Egypt	England	127,350	101,684	108,362	
Canada	Egypt			48,560	48,560
Newfoundland	Canada		47,228		47,228
Dutch W. Indies	England	17,068			17,068
	Dutch West Indies	34		12,037	12,071
	Argentina	21,482,059		4,215,552	27,621,628
Argentina	England	1,505,054		227,653	
	Belgium	62,478			
	Uruguay			128,832	
Mexico	Mexico	14			14
Brazil	Brazil			55,722	55,722
Chile	Chile	140,657		24,136	164,793
Colombia	Colombia			63	63
Peru	Peru		80,683		112,134
Venezuela	England		31,451		
	Venezuela			19,117	19,117
Uruguay	Uruguay	2,666,702		91,229	3,216,988
	England	459,057			
Falkland Islands	England	20,497			20,497
	Australia and Tas- mania	12,396,197			22,863,440
Australia and Tas- mania	England	10,330,077		78,075	
	Germany	6,186			
	France	160			
	Scotland	52,088			
	Canada	657			15,631,237
New Zealand	New Zealand	1,955,405			
	England	13,445,629	230,203		
Total		65,510,945	7,475,718	104,240,109	177,226,772

The following table gives the total gross imports into the United States for the seven last fiscal years. The quantity imported into other than the principal ports can be ascertained by comparison with Tables XI. and XII.

TABLE XIV. — GROSS IMPORTS OF WOOL, FISCAL YEARS 1906-1912.

	Class I.	Class II.	Class III.	Total.
1906	86,810,307	15,204,254	99,674,107	201,688,668
1907	82,982,116	10,671,378	110,194,051	203,847,545
1908	45,798,313	13,332,540	66,849,681	125,980,524
1909	142,580,993	21,952,259	101,876,052	266,409,304
1910	111,604,330	31,614,235	120,721,019	263,939,584
1911	40,104,845	12,456,468	85,086,328	137,647,641
1912	71,203,329	15,557,664	106,639,720	193,400,713

TABLE XV. — IMPORTS OF WOOL MANUFACTURES, 1906-1912. (FOREIGN VALUE.)

	1906.		1907.		1908.		1909.		1910.		1911.		1912.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
GROSS IMPORTS YEARS ENDING JUNE 30.														
Carpets (sq. yds.)	1,182,005	\$4,643,520	1,068,010	\$4,435,067	686,784	\$2,795,066	1,042,378	\$4,032,512	1,205,982	\$4,591,721	1,003,741	\$3,807,805	841,249	\$3,850,804
Clothing, etc., except shawls and knit goods	.....	1,626,279	.....	1,674,915	.....	1,620,270	.....	1,416,934	.....	1,813,542	.....	2,274,756	.....	2,171,477
Cloth, pounds	4,870,818	5,157,420	5,336,546	5,732,200	4,443,248	4,859,796	4,510,224	4,780,606	6,232,790	6,425,664	4,727,279	5,142,507	4,119,110	4,630,478
Dress goods (sq. yds.)	52,830,942	10,049,686	46,924,917	9,240,245	45,035,142	9,217,804	34,619,747	6,761,536	48,345,084	9,374,140	30,414,343	6,262,566	15,415,245	3,279,198
Knit fabrics	.....	265,133	.....	210,856	.....	35,635	.....	57,113	.....	17,258	*	*	*	*
Shoddy, flecks, etc., pounds	1,171,065	433,863	674,289	271,116	1,265,038	125,804	495,173	141,625	*	*	*	*	*	*
Shawls	.....	45,544	*	*	*	*	*	*	*	*	*	*	*	*
Yarns, pounds	198,601	156,629	195,797	154,668	192,826	151,035	284,393	233,704	*	*	*	*	*	*
All other	.....	702,609	.....	602,170	.....	582,568	.....	678,430	.....	1,309,850	.....	1,082,157	.....	980,662
Total	.....	23,080,683	.....	22,821,237	.....	19,381,978	.....	18,102,460	.....	23,532,175	.....	18,569,791	.....	14,912,619

* Included in "All other."

IMPORTS OF WOOL MANUFACTURES.

Table XV., page 333, which gives the gross imports of manufactures of wool, shows a total foreign value of \$14,912,619, a decrease of \$3,657,172 from 1911 and \$2,262,597 less than the average of the preceding six years.

This, being the foreign invoice value, cannot properly be used for comparison with the value of home manufactures, except by the addition of the customs duties paid. For such purposes the table of imports entered for consumption should be used.

IMPORTS OF WOOL AND MANUFACTURES OF WOOL ENTERED FOR CONSUMPTION.

The figures in the table on page 402, showing the imports of foreign wools and the manufactures of wool entered for consumption during the fiscal year, differ from those in the tables of gross imports and must not be confused with them. Only those quantities which go into consumption are included in the former, while in the tables of gross imports, all imports, those entered in bond as well as those entered for immediate consumption, are embraced.

The duty paid value of the imports of wool is \$47,595,642 and of all manufactures of wool, including wool partially manufactured and not specially provided for, \$27,781,940, making the total duty paid value of wool and its manufactures, \$75,377,582.

LONDON SALES.

The sixth of the London sales of Colonial wool for 1911 began November 28 and closed December 9. The net amount available was 128,000 bales, of which 118,000 were sold, leaving 10,000 to be carried over into this year. The distribution was as follows:

Home consumption.....	60,000 bales.
Continent.....	54,000 "
America.....	4,000 "
Carried over.....	10,000 "

The following statement shows the supplies and deliveries

of Colonial wool in the London market for the first four series of 1912, as compared with the first five of 1911:

London Market.	1911.	1912.
Held over from December previous year.....	8,000 bls.	10,000 bls.
Net Imports for the first 4 series of 1912, and the first 5 series of 1911	808,000 "	797,000 "
	<hr/> 816,000 bls.	<hr/> 807,000 bls.
Home Consumption....	483,000 bls.	471,000 bls.
Continent "	294,000 "	288,000 "
America "	13,000 "	41,000 "
	<hr/>	<hr/>
Total sold (first-hand wools)	790,000 bls.	800,000 bls.
	<hr/>	<hr/>
Held over for last series	26,000 bls.	7,000 bls.

The net imports amounted to 797,000 bales, and as there were 10,000 bales held over from last year, the total available supply was 807,000 bales. The quantity available for each sale and the destination of the purchases are shown in the table which follows:

LONDON SALES — COLONIAL WOOL, FIRST FOUR SERIES, 1912.

	Available.	England.	Continent.	America.	Total Sales.	Held Over.
	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.
Jan. 1, 1912.....	.....	.....	.....	.....	.....	10,000
Jan. 16–Feb. 3	180,000	92,000	68,000	7,000	167,000	13,000
April 11–May 4.....	275,000	145,000	100,000	10,000	255,000	20,000
July 2–Aug. 2.....	268,000	148,000	72,000	18,000	238,000	30,000
Sept. 24–Oct. 10....	147,000	86,000	48,000	6,000	140,000	7,000

The total sales were 800,000 bales distributed as follows: to England, 471,000 bales; the Continent, 288,000 bales; to America, 41,000 bales, and 7,000 bales were held over for the next series, which began November 26, the entries closing November 18, with 97,000 bales available for the series, of which 61,000 was of the new Australian clip.

Messrs. Helmuth Schwartze & Co. comment upon each of the series of London sales as follows: Of the first series, which commenced January 16 and closed February 3, they say:

There was a good attendance and competition was general; America, however, again playing a rather modest part.

Merino wool sold on the average about on a par with the close of December. Fine-haired spinners' wools, indeed, and all superior scoureds were fully up to that level, but ordinary wools, both grease and scoured, barely fetched December rates, while strong-haired and inferior lots often showed 5 per cent decline.

Crossbreds were unchanged from last sales, except in the case of light medium wools suitable for America, which showed 5 per cent advance.

Cape grease sold at from a farthing to a halfpenny decline, while the few snow whites offered were unchanged.

Two thousand, six hundred and thirty-two bales of Punta Arenas wool were sold at prices fully on a par with last sales.

The second series, postponed from March 5, owing to the coal strike, commenced April 11 and continued till May 4:

There was a very full attendance of buyers and competition was animated.

Compared with the close of the January series prices for merino are firmly maintained. Good greasies occasionally fetch a slight advance.

Crossbreds, too, sell well on a par with last sales.

Capes, which were well represented, fetched full January rates.

Three thousand, five hundred and forty-two bales of Punta Arenas wool sold at prices showing no change from January.

The list was closed on the 25th of March, when the fresh arrivals amounted to 602,524 bales (473,210 bales Australasian and 129,314 bales Cape). Deducting what has been forwarded direct, but adding the wools held over from last series, the total available amounts to 272,000 bales. The sales will also include 20,000 bales Punta Arenas and 3,000 bales Falkland Islands.

The third series occupied from July 2 to August 2:

In spite of the many difficulties caused by the dock strike these sales have been brought to a successful conclusion, and the attendance has been quite good throughout, with a brisk tone and good general competition.

Merino wool has sold (on the average) at from par to 5 per cent advance as compared with May closing prices, all good greasies of fair length of staple marking a halfpenny rise from last sales' level.

Crossbreds were in keen request all through the series and benefited further by a good American demand. The bulk of

wools suitable for the Home Trade or for Continental use sold at from par to 5 per cent advance for the fine and medium sorts, and at fully 5 per cent advance for very coarse lots. Wools suitable for the States, however, found buyers at a rise of from $7\frac{1}{2}$ to 10 per cent for the fine qualities and of 10 per cent for medium and coarse wools. Scoured crossbreds were very irregular and now sell on a par with May.

The fourth series began September 24 and closed October 10, with satisfactory results. It was clear that both worsted and woolen manufacturers were well employed and apparently little attention was paid to the war clouds gathering in southeastern Europe:

There has been a fair attendance, and the strong tone has been most marked all through the series. In the early sales merino wools sold at from par to 5 per cent advance as compared with the previous series, but strengthened their position as the sales continued and at the close show a rise of from 5 to $7\frac{1}{2}$ per cent. The best greasies indeed mark very little change, but all ordinary, average grease sells at a full halfpenny over July, while scoureds, both the better classes and medium faulty sorts, are from a penny to three halfpence dearer.

Fine crossbreds have sold at from par to 5 per cent, medium wools at 5 per cent, advance all through the series. Coarse wools, which opened with an advance of fully 5 per cent, stiffened further during the progress of the sales, and at the close stand at from $7\frac{1}{2}$ to 10 per cent over July, while in the case of very rough wools this rise is often even exceeded.

Fine slipes were barely 5 per cent, medium and coarse from 5 to 10 per cent, dearer than in July.

Cape grease was fully on a par with last sales, while snow whites barely realized July rates.

The preceding statements refer only to the London market. Adding the transit wools and the direct imports, the total deliveries to the trade as stated by Helmut Schwartz & Co. are as follows:

Distribution of Colonial Wool through England and direct.	Total Season. 1911.	Total Season. 1910.	Four Series. 1912.	Five Series. 1911.
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
Sold to England	1,086,000	1,008,000	982,000	1,004,000
“ “ Continent	1,760,000	1,650,000	1,642,000	1,586,000
“ “ America	52,000	125,000	99,000	48,000
	2,898,000	2,783,000	2,723,000	2,638,000

The deliveries for the four series show an increase of 85,000 bales. The home trade took 22,000 bales less and the Continent 56,000 bales more than in the preceding year. The American trade was 51,000 bales more than last year. As compared with the corresponding series in the preceding year, 99,000 bales were held for America as against 48,000 bales in 1911, an increase as stated of 51,000 bales, although in 1910 America took 125,000 bales in the corresponding series.

Buxton, Ronald & Company in their Annual Wool Report, from which we quote, sum up the season's business as follows:

Many of the incidents of the past twelve months were of such a nature as might well have disturbed the ordinary course of business, but thanks to excellent trade conditions and the enterprise shown in commercial circles as a whole, European wars and rumors of wars, national coal strikes, strikes of dock laborers and transport workers and threats of railway strikes had very little, and certainly no lasting, adverse effects. There was not at any time any real lack of confidence, the trade of this and nearly all other European countries and all our own Colonies and of the United States being in a most healthy and vigorous condition, due mainly to the spending powers of the various peoples having been largely increased by good harvests of cereal and other products.

The comparative figures show how our article has come through the various difficulties which cropped up from time to time, and how it has responded to the otherwise favorable conditions. Stocks, supply, and consumptive capacity twelve months ago one and all presented a favorable aspect, and with minor fluctuations the course of the market has been dominated by a due regard to these three cardinal points, with the result that wool growers have been able to sell their products, merinos as well as cross-breeds, at thoroughly good paying prices, and Australian growers at any rate can look back on the season 1911-1912 with every satisfaction as having been in most districts a record one for quantity. From the trade's point of view the past season has been a good one, and spinners again undoubtedly have done well. To commence with there was a disposition on the part of top makers to sell forward at what seemed, and eventually proved to be, very moderate figures, but no great harm was done, and with trade remaining active the large purchases in Colonial markets were financed and disposed of satisfactorily, both Germany and France perhaps having had more than their full share.

The future seems full of promise for the present level of wool values being at any rate well maintained. Indeed, looked at

from a purely supply and demand point of view, a further advance is by no means improbable. Board of Trade returns of this country have been and look like continuing good, and from the Continent accounts generally agree as to the probability of expansion rather than contraction of the turnover in wool and its allied manufactures. The American position cannot remain very much longer in the uncertain condition under which it has been laboring for all too long now. The result of the Presidential election now taking place should do much to clear the air and enable dealers and others to engage once more actively and with confidence in their respective businesses, but whatever the results and whatever the reduction in wool duties may be, it will in the face of the general prosperity of the country be surprising if there be not a greater demand for foreign wools in the States than there has been for some time now. There is, of course, the war in the Balkan States to be taken into consideration, and in view of the well-known complicated character of the Eastern question it is impossible to forecast the issue, but granted that the conflict remains confined to the present belligerents, it is not unreasonable to suppose that any injury to our direct trade with the countries now at war will be compensated for by a heavy consumption of woollen goods required by the armies in the field. The demand all round, therefore, is likely to be large, but on the question of supply the same cannot unfortunately be said, the drought in Australia being estimated on competent authority to have caused a shortage of something rather over than under 300,000 bales. Then again the season in South Africa has been in many districts very indifferent, and no advance on last year's increased production is at all likely. A decrease may in fact show itself and the same remark applies to South America and New Zealand, as well as to our Home clip, but more particularly the two latter. The fact, therefore, stands out plainly that with a demand which from year to year shows such unmistakable signs of increase, a decrease such as is revealed by the figures of this recent Australian drought cannot be treated with indifference by the wool and woollen trades at large.

Merino.

Australasian. — Character and selection. — The clip was for the most part an improvement on its predecessor, a good season having left its mark in many districts in the shape of a strong sound staple with not more than an average percentage of grease and burr. The good season, however, accentuated the tendency which Australian wools of late years have shown to go off in quality, and indeed some of the merinos appearing under well-known brands were nearer a fine crossbred than a merino. Buyers complain persistently of the difficulties they have nowadays in finding really fine quality wools, but after all is said and done they have only themselves to blame, the plain fact being, of

course, that until they pay a grower such a price for his fine haired, smaller, lighter cutting fleece as will more than make up to him for his loss in weight, they cannot expect any recruits to the ranks of really fine quality growers.

The following are the quotations for an average super 60s Top during the past year :

	1911.		1912.									
	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.
Tops Australasian 60s	d. 24½	d. 24½	d. 24½	d. 24	d. 24½	d. 24½	d. 25	d. 25	d. 26½	d. 26½	d. 26½	d. 26½

South Africa.—The quantities catalogued on this market during the period under review show a very trifling decrease as compared with those of the preceding twelve months, but as the decrease has occurred in what may be termed speculation lots, and not in the shipment of regular straightforward clips sent here for realization on growers' account, this decrease is not a matter of moment. The satisfactory feature is the fact that individual growers and associations who have been in the habit of realizing here now for some few seasons, have continued this policy, and have apparently by their example induced others to do likewise. Evidently results have been to their liking in the past, and the system obtaining in this market whereby each individual grower's clip, large or small, is catalogued and sold separately under its own brand, is recognized as a sound one, and indeed it is the only one under which any improvement in the style and get up of the average grower's wool is possible. The wools are brought out into the full light of the auction room, opportunity is given for a critical examination of each clip, and the grower can then be fully advised as to the possibility or advisability of any change either in the style of wool or in the manner of market preparation. The advantages thus obtained over the old system of selling clips up country, be they good, bad or indifferent, at one all round price, are too manifest to further emphasize. It is indeed a sign of the times, and of the great strides which have been made of late years in South African wool growing circles, that opportunities for adverse criticism should be so much fewer than formerly. There are still examples of good wools having scarcely received that amount of care in skirting and classing to which they are entitled, and there is also still a goodly number of growers who believe in wasty, yolk-saturated fleeces and a small price rather

than in a bulky, lighter type at perhaps one-third more money. These cases, however, are getting fewer, and by their decrease testify in an eloquent manner to the sound work which has been carried on in previous years under the different governments, and is now being continued under a United South Africa, which is fully alive to the importance to the country at large of the wool growing industry. It is a certainty that with an ever-increasing demand, South African wools will take a much more important place in the eyes of the trade than they have ever enjoyed before. It is all the more incumbent, therefore, upon growers to keep up their progressive work, and to put their wools on the market in the best way to compete with wools from other countries and to be in the best possible position to take advantage of any extra demand which may be focused on South African wools through the quality of the bulk of the Australian clip getting more robust.

Crossbreds.

Supply. — The quantities from both Australia and New Zealand show increases on the figures of last year.

Descriptions.	1912.	1911.	1910.	1909.	1908.	1907.	1906.	1905.
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
Australian	74,000	59,600	52,200	51,200	62,500	37,600	37,400	33,200
New Zealand	395,600	380,000	341,300	390,400	365,700	328,400	287,400	261,400
Totals	469,600	439,600	393,500	441,600	428,200	366,000	304,800	294,600

The New Zealand clip, while a distinct improvement on that of 1910–1911, was not by any means beyond the average. As noted on previous occasions the general type is slowly but surely tending towards a wool of medium quality, doubtless owing to the increasing use of the Romney strain in most flocks. This is in a measure to be regretted, as the circle from which supplies of strong coarse staple, on which the trade in this country has been built up, almost in the nature of a monopoly, is an ever narrowing one. Against this, of course, the fact must not be lost sight of that these medium quality wools appeal more to Continental buyers than the really coarse, but competition from the Continent is apt to be a much more variable quantity than that from our home trade. As a consequence of this freer supply the difference, at the time of writing, between an ordinary 44s top and a 40s is no more than $\frac{1}{2}$ d. per pound.

LIVERPOOL WOOL SALES.

Messrs. Hughes & Isherwood report the Liverpool wool sales for the first five series of 1912 in bales as follows:

January.	March.	May.	July.	September.	Bought by
5,400	6,900	3,650	4,300	3,300	America.
6,100	7,100	5,950	5,650	6,300	Continent.
13,632	15,317	13,676	16,742	19,781	Home trade.
25,132	29,317	23,276	26,692	29,381	Total sold.
5,132	10,104	7,669	9,953	7,825	Withdrawn.
30,264	39,421	30,945	36,645	37,206	Bales offered.

The sales for the six series of 1911 are given for comparison:

January.	March.	May.	July.	September.	November.	Bought by
4,100	4,550	1,800	3,060	3,250	3,760	America.
5,600	10,400	7,500	4,800	5,750	7,950	Continent.
11,238	19,854	16,228	15,886	16,170	18,371	Home trade.
20,938	34,804	25,528	23,746	25,170	30,081	Total sold.
5,505	11,530	7,923	10,390	19,180	11,057	Withdrawn.
26,443	46,334	33,451	34,136	44,350	41,138	Bales offered.

General remarks. — The persistent buying, week by week, of the lots withdrawn in July foreshadowed a good demand at the September auctions, and anticipations of a good result have been fully realized. For 1st white Joria — which was a small and unattractive offering — the inquiry was certainly rather disappointing; but all other descriptions sold splendidly, and at advances which, although slight in some growths, attained important dimensions in others.

In all the wool consuming districts of this country and the United States activity still exists, and even in the North of France, where business has been less satisfactory, some improvement has taken place, so that there, too, a large consumption is now going on. This healthy state of affairs, moreover, seems likely to continue, as spinners and manufacturers have orders on their books which will keep them busy for some time to come. Shipments of wool from Bombay are now showing the falling off that has been expected as the result of the recent drought in

certain important up-country districts, and — allowing for what will probably be sold meanwhile — the total supply for November is not, in our opinion, likely to exceed 32,000 bales. Altogether, therefore, the outlook appears to be satisfactory, the more so as the production of wool in other countries is not keeping pace with the world's increased consumption.

Of the fifth Liverpool series of sales of East India and other wool, Messrs. Thomas & Cook say :

There was a fair to good selection of most descriptions, and active competition throughout for all clean and useful sorts. Best Joria and Vicanere whites were in fair supply, but in the absence of any special American demand failed in many instances to realize the full prices of the July auctions, so that withdrawals were frequent. Best Kandahar whites, although on the whole not of a very attractive character, sold steadily at old rates, as also did coarse whites, but medium whites were in very good request and sold freely at par to 5 per cent over the July level. Yellow wools were scarce and under keen competition sold readily at 5 to 7½ per cent advance, while grays were in specially good demand and realized 5 and in many instances quite 10 per cent over former values. It is estimated that about 6,150 bales were taken for Continental account, and about 3,150 bales for America, as compared with 5,450 bales, and 4,100 bales, respectively, at the last sales. Home trade users secured about 19,450 bales as against 16,370 bales in July. The withdrawals, largely due to the stiff limits imposed by shippers, total about 8,460 bales.

Egyptians were in active request and practically all sold at prices par to ½ d. per pound over those current at the last auctions. There was also fair competition for the Oportos, but owing to high limits only a moderate quantity of the offerings passed the hammer, fleece parcels realizing ¼ d. to ½ d. per pound advance, and inferiors about maintaining former values. A fair proportion of the Syrians and sundries found buyers at prices favoring sellers, but the cattle hair was mostly withdrawn.

Peruvian merinos were neglected, and very little sold, but other qualities were in fair request and about 860 bales passed the hammer at prices quite up to those current at the May sales. Chili wools were mostly a poor selection, for which there was only limited competition, but the prices realized for the lots sold showed little change. A fair proportion of the River Plate and Sundries found buyers at steady rates. Since the auctions a steady demand has been experienced for Peruvian wools at fractionally better prices, while Chili wools have been in improved request and have sold freely at prices rather favoring sellers.

Alpaca. — During most of the period under review a somewhat slow demand was experienced for Arequipa and other

fleece with only occasional sales at about steady rates. Recently, however, the falling off in the imports and the gradually reduced stocks have brought buyers more freely into the market, and rather more important sales have been effected at prices $\frac{1}{2}$ d. to $\frac{3}{4}$ d. per pound over those formerly current, and the tone of the market is still firm. Inferior descriptions have also been in better request and with diminished stocks a steady business has been done at hardening rates.

Turkey mohair. — There has not been much animation in this article during the period under review, and in the absence of any decided improvement in "yarns," the demand has been little more than of a retail character at about unchanged values.

ANTWERP AUCTIONS.

The Antwerp Wool Sales were held on the following dates: 1st series, January 10; 2d series, February 29; 3d series, March 29; 4th series, June 6; 5th series, September 20; with sales reported by Messrs. Fuhrmann & Co. as follows:

	1st Series.	2d Series.	3d Series.	4th Series.	5th Series.
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
Buenos Ayres	283	919	597	1,506	1,651
Montevideo	693	2,060	1,399	2,718	4,796
Rio Grande.....		682	49	682	1,026
Entre Rios		242		20	
Fray Bentos.....	74	193	99		
Punta Arenas.....				27	91
River Plate Slipes.....					176
Total River Plate	1,050	3,414	2,144	4,953	7,740

Australia	8	5	75	565	54
Cape.....	11	22	16	2	14
German Africa				34	
Spain				28	1
South West Africa.....	4	75		48	20
Total sundry	23	102	91	677	89
Total sales	1,073	3,516	2,235	5,630	8,829

Messrs. Fuhrmann & Co. in their circular of September 20, 1912, quote prices as follows :

	Per Kilo Clean without Washing Charges, Combed in Oil.	Parity Pounds English, Combed in Oil, Net Cash.
Extra Montevideo merino 1 A. combing...	f. 5.25	22½d.
Super Montevideo merino 1 A. combing ..	f. 5.15	22¼d.
Very good Montevideo merino 1 A. combing	f. 5.00	21½d.
Good Montevideo 1 A. combing	f. 4.90	21¼d.
Good average Montevideo 1 A. combing ..	f. 4.55	19¾d.
Montevideo crossbreds 58s.....	f. 4.55	19¾d.
Montevideo crossbreds 56s.....	f. 4.15	18d.
Montevideo crossbreds 50s.....	f. 3.75	16¼d.
Montevideo crossbreds 46s./48s	f. 3.45	14¾d.
Montevideo crossbreds 44s.....	f. 3.25	14d.
Montevideo crossbreds 40s.....	f. 3.05	13¼d.

According to Messrs. Helmuth Schwartze & Co., the imports of South African wool into Europe of late years (November to November) have been as follows :

	1910-11.	1909-10.	1908-9.	1907-8.
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
England (for the sales)	295,167	313,471	312,082	227,747
Continent direct	80,870	63,265	67,946	47,883
America direct				
Total.....	376,037	376,736	380,028	275,630

The production has remained stationary.

In this connection attention is directed to the remarks of Buxton, Ronald & Company on South African wools quoted on a preceding page of this Review.

RIVER PLATE WOOLS.

Table XVI. shows the imports into Europe of these wools for a series of years. The business is done between July 1 and April 30 of the succeeding year. The importations do not vary greatly from last year, being 322,000 bales against 329,000, a reduction of 7,000 bales, notwithstanding an increased importation from Montevideo of 5,000 bales over a year ago.

TABLE XVI. — IMPORTS OF RIVER PLATE WOOLS INTO EUROPE BETWEEN JULY 1 AND APRIL 30 SUCCEEDING, 1894 TO 1912 INCLUSIVE.¹

In thousands of bales.

Year.	Dunkirk.	Havre.	Antwerp.	Bremen.	Ham- burg.	Other Ports.	Total.	Of which from Monte- video.
1894	149	14	68	38	56	15	340	34
1895	133	7	78	36	46	30	330	45
1896	195	20	90	50	50	35	440	70
1897	161	11	76	33	58	12	351	35
1898	163	8	80	80	81	56	468	80
1899	221	14	71	45	81	29	461	54
1900	169	8	67	50	61	33	388	45
1901	94	16	52	29	44	35	270	55
1902	208	12	79	34	89	78	500	54
1903	172	9	62	35	65	67	410	51
1904	149	8	58	38	70	48	371	41
1905	132	6	70	35	70	68	381	45
1906	138	33	56	28	73	85	413	56
1907	132	19	55	19	93	71	389	46
1908	121	30	54	16	79	57	357	53
1909	217	5	84	23	111	100	540	110
1910	135	11	58	15	86	63	368	83
1911	110	4	50	24	82	59	329	65
1912	98	6	51	22	67	76	322	70

¹ Wool circular of Wenz & Co., Reims, May, 1912.

Table XVII. contains a statement of the production of River Plate wools for a period of sixteen years,¹ the productive season extending from October 1 to September 30 following.

TABLE XVII.

SEASON OF	ARGENTINA.			URUGUAY.			GRAND TOTALS.		
	Quan- tity.	Ave. weight, Bales.	Total weight.	Quan- tity.	Ave. weight, Bales.	Total weight.	Quan- tity.	Ave. weight, Bales.	Total weight.
	<i>Bales. a.</i>	<i>Kilo. b.</i>	<i>Metric Tons. a. c.</i>	<i>Bales. a.</i>	<i>Kilo. b.</i>	<i>Metric Tons. a. c.</i>	<i>Bales. a.</i>	<i>Kilo. b.</i>	<i>Metric Tons. a. c.</i>
1895-96.....	443,0	380	168,3	100,0	466	46,6	543,0	396	214,9
1896-97.....	486,0	412	200,3	88,0	466	41,0	574,0	420	241,3
1897-98.....	495,0	417	206,5	90,0	466	42,0	585,0	424	248,5
1898-99.....	487,0	425	207,2	81,0	469	38,0	568,0	431	245,2
1899-00.....	465,0	429	199,4	85,0	470	40,0	550,0	435	239,4
1900-01.....	405,0	445	181,0	86,5	471	40,8	491,5	451	221,8
1901-02.....	444,0	445	197,6	86,0	470	40,4	530,0	449	238,0
1902-03.....	481,0	412	198,4	104,0	471	49,0	585,0	422	247,4
1903-04.....	416,0	420	174,7	86,0	471	40,4	502,0	428	215,1
1904-05.....	411,0	417	171,2	82,5	472	38,9	493,5	425	210,1
1905-06.....	395,0	417	165,0	90,5	450	40,7	485,5	423	212,9
1906-07.....	389,0	417	162,2	99,0	454	44,7	488,0	424	206,9
1907-08.....	427,0	417	178,0	110,0	460	50,6	537,0	426	228,6
1908-09.....	438,0	415	182,0	126,0	459	57,3	564,0	425	239,8
1909-10.....	359,0	413	148,4	123,0	458	56,4	482,0	424,8	204,8
1910-11.....	394,0	409	161,0	134,5	458	61,6	528,5	421	222,6

a. Two 00 omitted, thus 443,0 = 443,000.

b. Kilo equals 2,2046 pounds.

c. Metric ton equals 2,204.6 pounds.

Of the season in Buenos Ayres, Messrs. Wenz & Co. say in their Circular of May, 1912 :

Cold weather delaying shearing, wools did not begin to arrive before the latter half of October, or a fortnight later than last year.

Heavy rains early in November again delayed shearing, but improved the color of the clip. Buyers at first held back as owners were asking high prices; the stock of wool in the Central Market continuing to increase in spite of small arrivals, owners reduced their pretensions and a good inquiry resulted, mostly for English and American account. Continental manufacturers also began to buy slowly, but confined their purchases mainly to merinos and fine crossbreds. French topmakers held back. The end of the month brought rather better prices for English and American styles. The inquiry, which now was fairly general, indicated that machinery was short of wool, but also reflected a certain growth of confidence in Europe. In December, reports from the London sales checking English and American buyers, low crossbreds became easier; other sorts, however, remained in

¹ Exclusive of local consumption, which may be put at 6,000 tons (14,500 bales) for the Argentine Republic and 1,150 tons (2,500 bales) for Uruguay.

fair demand. The market was beginning to tend in buyers' favor, when a strike among the packers broke out and brought business to a standstill for five weeks. When the strike ceased, requirements were general and prices hardened both for cross-breeds and merinos, the latter being in great demand.

At the end of January the engine drivers went on a strike and the arrivals were confined to waterborne wools from Entre Rios and Patagonia. During the month that this strike lasted, the selection naturally became very restricted and even when the railways were again working in full, arrivals came forward slowly, as preference was given to grain.

This state of things made buying difficult and helped largely to sustain prices. In March England and the Continent again began to buy freely, America holding back. The daily turnover exceeding the arrivals, prices gradually hardened; this activity was well maintained and the selection simultaneously falling off, there was a further advance about the middle of April, French buyers being very keen. The season then drew rapidly to a close.

The clip on the whole was not as good as the preceding one: Southern wools were not so well grown, the backs being frequently mushy and earthy; they were also rather more burry and of a grayish color. Northern and Western wools were fatty and thin, but less burry; Entre Rios, in large supply, were very poor. Wools from Chubut and Neuquen, where the output is steadily increasing, were very little better than last season.

IMPORTS INTO UNITED STATES OF ARGENTINE WOOLS FOR YEARS 1904-1912 INCLUSIVE.

Fiscal Year.	Class I.	Class II.	Class III.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1904.....	18,018,443	100,548	10,049,069	28,168,060
1905.....	41,094,617	362,562	6,238,388	47,695,567
1906.....	36,352,480	.....	5,815,447	42,167,927
1907.....	19,247,683	94,866	3,852,659	23,195,208
1908.....	14,311,498	.....	1,909,787	16,221,285
1909.....	51,601,420	106,239	6,672,175	58,379,834
1910.....	27,331,068	37,799	3,713,317	31,082,184
1911.....	14,014,295	96,326	3,780,755	17,891,376
1912.....	23,049,591	.....	4,572,037	27,621,628

The table above gives the imports of Argentine wools into the United States for the nine years 1904-1912 inclusive.

While these imports are ten millions of pounds greater than they were in the preceding year yet they fall short of the average for the preceding eight years, in the table, by 6,500,000 pounds, the shortage being mostly in the Class I wool.

URUGUAY.

The production¹ is reported at 61,600 metric tons as against 56,400 of the previous year, an increase of 5,200 tons, equal to 119,000 pounds.

Of the conditions in Montevideo Messrs. Wenz & Co. say:

The clip, though fairly well grown and free, was fatty and frequently damp, as shearing took place during unfavorable weather. Wools from the center were good; those from the west, now mostly crossbreds, were very satisfactory.

England bought freely throughout the season and took considerably more than usual. For French and German account the bulk of purchases was made in the latter half of the season.

The output of crossbreds is increasing. These descriptions sold about on a par with Buenos Ayres rates.

IMPORTS OF URUGUAYAN WOOLS INTO THE UNITED STATES FOR THE YEARS
1904-1912 INCLUSIVE.

Fiscal Year.	Class I.	Class II.	Class III.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1904.....	112,208	.....	.....	112,208
1905.....	7,044,752	619,377	76,180	7,740,309
1906.....	5,083,195	.....	3,995	5,807,190
1907.....	5,856,437	.....	174	5,856,611
1908.....	1,604,221	.....	.....	1,604,221
1909.....	5,759,852	.....	108,380	5,868,232
1910.....	8,768,627	.....	21,158	8,789,775
1911.....	711,525	.....	.....	711,525
1912.....	3,125,759	.....	91,229	3,216,988

Table XVIII. contains the most recent statistics available of the number of sheep in the world. In some countries goats are included and some report lambs with the sheep, while others do not. In some countries no statistics exist, so that the table is neither so complete nor so exact as might be desired, but it is useful for comparison with preceding reports and naturally becomes more nearly correct each year as fuller and more accurate statements are obtainable.

The figures for the United States are those of the Department of Agriculture as of January 1, and are compiled upon the estimates of its correspondents of the gains or losses as compared with the preceding year. They show a small gain in the number over the previous year.

¹ See Table XVII.

TABLE XVIII. — NUMBER OF SHEEP IN THE WORLD ACCORDING TO THE MOST RECENT AVAILABLE STATISTICS AND ESTIMATES.

Country.	Number of Sheep.
NORTH AMERICA:	
United States: Continental	¹ 52,752,887
Noncontiguous, except Philippine Islands:	
Hawaii	76,719
Porto Rico	6,363
Alaska	199
Total	83,281
Total United States	52,836,168
Canada	2,512,650
Newfoundland	78,052
Mexico	3,424,430
Central America	124,044
Cuba	9,982
British West Indies	27,960
Dutch " "	22,643
Guadeloupe	11,731
	6,211,512
Total North America	59,047,680
SOUTH AMERICA:	
Argentina	77,303,517
Brazil .....	.....
Chile	4,224,266
Uruguay	26,286,296
Falkland Islands	724,736
Colombia	746,000
Other South America	408,327
Total South America	109,693,142
EUROPE:	
Austria Hungary:	
Austria	2,428,586
Hungary	7,526,783
Bosnia-Herzegovina	2,498,854
Total	12,454,223
Belgium	235,722
Bulgaria	8,130,997
Denmark, Iceland, and Faroe Islands	1,319,197
Finland	904,447
France	17,110,760
Germany	7,703,710
Greece	4,568,158
Italy	11,162,708
Montenegro	400,000
Netherlands	889,036
Norway	1,393,488
Portugal	3,072,998
Roumania	5,655,444
Russia in Europe	246,989,000

¹ Includes lambs.² Includes goats.

TABLE XVIII. — *Continued.*

Country.	Number of Sheep.
EUROPE: <i>continued.</i>	
Saxony	58,185
Servia	3,160,166
Spain	15,117,105
Sweden	1,010,217
Switzerland	159,727
Turkey	¹ 6,912,568
United Kingdom, including Isle of Man, etc.	31,082,461
All other Europe	26,120
Total Europe	179,516,437
ASIA :	
British India:	
British Provinces	23,237,546
Native States	3,321,366
Total	26,558,912
Ceylon	96,335
Cyprus	² 294,456
Japan	3,411
Philippine Islands	88,760
Russia in Asia	38,017,000
Turkey in Asia	45,000,000
Total Asia	³ 110,058,874
AFRICA :	
Algeria	9,066,916
British East Africa	6,000,000
German East Africa	1,560,000
German South West Africa	300,722
Madagascar	333,454
Rhodesia	250,182
Soudan (Anglo-Egyptian)	952,950
Tunis	615,584
Uganda Protectorate	471,297
Cape of Good Hope	19,026,884
Natal	1,068,996
Orange Free State	7,481,251
Transvaal	3,170,708
All other Africa	1,130,335
Total Africa	51,429,279
OCEANIA :	
Australia	92,742,034
New Zealand	24,269,620
Total Australasia	117,011,654
Other Oceania	15,120
Total Oceania	117,026,774
Total World	626,872,186

¹ Not including vilayets of Scutari and Constantinople.² One year old and over.³ No data are available for China.

DALGETY'S REVIEW.

As has been our custom we make liberal extracts from this valuable report, although necessarily not in the order in which originally printed. Frequently items relating to allied subjects are combined and much is omitted, lack of space making it impossible to reproduce all that is said.

THE PAST SEASON.

A record wool clip certainly has been marketed, but the cost of production has increased, whilst values have been on a lower level.

Although the official sheep numbers show a slight increase, Australia has passed through a short but very severe drought since the returns were collected, and some millions of sheep have perished; in addition to which the autumn and winter lambing has been a partial failure, while the coming clip (that of the present year) will show a serious shrinkage.

According to the latest available figures, the flocks in Australia and New Zealand now total 117,011,654, having increased since last year's returns were published by the comparatively small number of 977,481 head.

The smallness of the increase in recent years is largely attributable to the very large numbers which have been slaughtered for export and local consumption, and it is significant that the opinion is generally held that sheep numbers were, prior to the drought, quite as high as could with safety be carried in normal seasons.

TABLE XIX.—NUMBER OF SHEEP AT CLOSE OF YEAR IN AUSTRALASIA, 1907-1911.

	1911.	1910.	1909.	1908.	1907.
New South Wales	45,032,022	45,825,308	46,194,178	43,329,384	44,555,879
Victoria	12,857,804	12,937,983	12,937,983	12,546,742	14,146,734
Queensland	20,387,838	20,153,239	19,593,791	18,348,851	16,738,050
South Australia	6,267,477	6,432,038	6,898,450	6,829,637	7,023,000
West Australia	5,408,583	5,157,658	4,892,419	4,098,500	3,694,852
Tasmania	1,788,310	1,735,000	1,728,053	1,744,800	1,729,394
Australia and Tasmania . .	92,742,034	92,241,226	92,044,874	86,896,914	87,887,909
New Zealand	24,269,620	23,792,947	23,480,707	22,449,053	20,989,772
Total	117,011,654	116,034,173	115,525,581	109,345,967	108,871,681

SHEEP PROSPECTS.

A point worth noticing is that though for some years past the seasons in Australia have been well above the average of excel-

lence, the sheep numbers have remained stationary, as they have also done in New Zealand. It would appear as though the extension of the agricultural and dairying industries, together with the heavy slaughtering, were making themselves felt, and it appears to be very unlikely that there will be any increase either in sheep numbers or wool production for some years to come.

Actual oversea shipments of wool during the past twelve months have amounted to 2,020,547 bales (or 662,845,907 pounds) from the Commonwealth, and 493,368 bales (or 169,915,939 pounds) from New Zealand, a total of no less than 2,513,915 bales, or 832,761,846 pounds, valued at £29,591,874.

The size of the Australasian clip is remarkable when it is considered that the 2,000,000 bale limit was reached for the first time but five years ago, and the past season's figures are nearly double those of the year 1903-04, when 1,366,942 bales were exported, and taking Australia separately they are more than double. No allowance has been made for wool on sheepskins nor for wool exported in the form of tops, which together amount to several millions poundssterling.

The net result of the year's transactions has been that the average price obtained for a bale of wool has been £11 15s. 5d., compared with £12 10s. 4d. in 1910-11, the average for the year being then 5.9 per cent below that of the previous year, and 13.5 per cent below results obtained in 1909-10, which shows the seriousness of the decline which has taken place in wool values during the past two years.

TABLE XX. — VALUE, AUSTRALASIAN CLIP, 1881-1911.

Calendar Year.	Total Value Wool Exports.	Calendar Year.	Total Value Wool Exports.	Calendar Year.	Total Value Wool Exports.
	£		£		£
1881.....	16,136,082	1903.....	18,042,873	1908.....	25,950,912
1891.....	24,063,227	1904.....	21,796,096	1909.....	33,128,496
1896.....	20,433,855	1905.....	25,203,549	1910.....	31,588,936
1901.....	18,936,557	1906.....	29,685,780	1911.....	29,581,874
1902.....	16,109,026	1907.....	26,768,952		

The total value of the 1,926,926 bales sold in Australasia was £22,682,000; and even presuming that the portion of the clip which has been sent direct to London for sale has only made a like average, the net gain in wealth to Australasia from wool alone will have amounted to

£29,581,874 for 1911-12, as compared with
 £31,588,936 for the year 1910-11,
 £33,128,496 for the year 1909-10,
 £25,950,912 for the year 1908-09,
 £26,768,952 for the year 1907-08, and
 £29,685,740 in 1906-07.

THE COMING CLIP.

There will, of course, be a deficiency in the volume of the coming clip, but it is very difficult to predict what the decrease will exactly be. The drought which set in directly after last shearing (October) was sharp, decisive, and almost universal in Australia, but the break-up has been so thorough and general that it is almost beyond the power of any one to accurately forecast at present the ensuing season's wool outturn.

After collecting as much information as it is possible for any wool house to obtain, we have come to the conclusion that losses of grown sheep in Australia can be set down at about 5,000,000. There are some who think 7,000,000 would be nearer the mark, but unless a good many sheep die from this out we consider the former figures to be on the right side. Estimates as to the lesser amount of wool which will be produced per head from the Australian flocks vary from one-half pound to one pound per head. After allowing for the balance of last year's wool, which is still held up by want of water in the Darling River, and from the wool which will be gathered from the dead sheep, etc., we have decided to venture the opinion that the falling off in the Australian clip for export in the ensuing season will be 250,000 bales, with no material alteration in New Zealand shipments as compared with last season's exports.

The coming clip is likely of course to show lack of length and body, but it will be fine, and the growing clip in the western district of Victoria, the southeast of South Australia, Tasmania, and New Zealand promises to be quite as good as last season.

There is one clear outstanding fact in connection with wool interests, and that is that consumption has already overtaken production. Supplies will not be so large during the ensuing wool year as in that just closed, and for this reason alone wool values are resting on a solid basis. It must also be remembered that present prices are not high, but, on the contrary, are below the average of the past 52 years, as well as under the average of the past seven years; thus an advancing market in the new season seems extremely probable.

WOOL PROSPECTS.

Consumers emphasize most strongly the scarcity of really fine quality wool produced in Australia nowadays, but until they give practical demonstration that it will pay as well to produce as the broad, bulky wool shorn from the big robust sheep now so much in favor with breeders the latter will be hardly likely to return to the smaller and more delicate sheep such as produce really fine-grade wool. Of recent years the difference in the price paid for fine-fibered wool as against bulky, broad combings has not been sufficient to make the former such a payable commodity to produce.

From a sentimental standpoint we are all sorry to know that Australian wool is neither so fine nor so soft as formerly; but sentiment is not business, and buyers must bear in mind that the more robust style of merinos now favored in Australia not only give quite as good a net monetary return per head for wool, but they are hardier, more prolific, and of much more carcass value than their finer wooled brethren.

The growth of the frozen meat trade, the fly pest, and the cutting up of the larger estates have all been contributing factors to further increase in cross-breeding, and there is not likely to be any contraction in the future, but the reverse.

The dearth and dearness of skilled labor is, as was forecasted in our last year's report, very seriously prejudicing the preparation of the Australasian wool clip. The fact that it is almost impossible to get properly trained shearing shed hands has so disheartened many growers who have until recently taken a great pride in the preparation of their clips for market, that in some instances they have decided either not to skirt their fleeces at all, or at all events to discard the old custom of piece picking, etc. This is all the more serious for Australasia when it is borne in mind that all our competitors in wool production are making great efforts to improve the breed of their sheep and preparation of their wool for market.

Messrs. Dalgety & Co. take exceptions to our Tariff Board's findings as to the cost of wool producing in Australia in the following words:

The Tariff Board seems to have been altogether too hasty in even expressing an idea as to the cost of wool production in Australia and New Zealand. Taking into consideration the capital value of freehold lands and the heavy taxation levied on woolgrowers, also the marketing charges and the scarceness and dearness of labor, the cost of producing wool in Australia is probably not less than 6d. per pound. That is the estimate of people best qualified to judge. On many freeholds the Federal land tax alone works out at 1s. 9d. per head of sheep, or, say, 2d. to 2½d. per pound of wool.

The "Review" states that the average weight of wool produced per head, including lambs equalled 7 pounds 4 ounces, the same as in the two preceding years, while in the seasons of 1908-09 and 1907-08 it was 6 pounds 14 ounces and 6 pounds 9 ounces respectively, thus showing a substantial increase of wool per head.

The following statement shows for a period of 16 years the number of fleeces per bale and the number of bales to the 1,000

sheep, and demonstrates the increased average weight of the fleece.

Year.	No. of Sheep and Lambs' Fleeces per Bale.	No. of Bales per 1,000 Sheep.
1896-7.....	59.65	16.75
1897-8.....	60.08	16.64
1898-9.....	59.62	16.76
1899-1900.....	57.95	17.25
1900-1901.....	55.88	17.89
1901-2.....	55.42	18.04
1902-3.....	51.36	19.46
1903-4.....	55.51	17.99
1904-5.....	52.70	18.97
1905-6.....	50.27	19.89
1906-7.....	49.65	20.13
1907-8.....	51.72	18.97
1908-9.....	47.79	20.92
1909-10.....	46.49	21.51
1910-11.....	47.	21.27
1911-12.....	46.56	21.48

AUSTRALIAN EXPORTS AND SALES.

The importance of the Australian wool auctions is shown in the following table, from which it appears that the percentage of sales in the home market has increased from 53 per cent in 1898-99 to 77 per cent in 1911-12, while the actual quantity sold has more than doubled during the period.

AUSTRALASIAN EXPORTS AND SALES.

Season.	Total Production.	Sales.	Sales to Production.
	<i>Bales.</i>	<i>Bales.</i>	<i>Per cent.</i>
1898-9	1,664,517	890,185	53
1899-0	1,594,464	915,877	57
1900-1	1,609,713	808,912	50
1901-2	1,664,885	1,035,520	62
1902-3	1,440,722	861,174	60
1903-4	1,366,942	837,497	61
1904-5	1,595,734	1,092,651	68
1905-6	1,869,455	1,354,865	72
1906-7	2,090,188	1,537,798	74
1907-8	2,057,831	1,351,121	66
1908-9	2,288,104	1,657,906	72
1909-10	2,434,643	1,889,745	77
1910-11	2,468,750	1,865,167	76
1911-12	2,513,915	1,926,926	77

Average weight per bale: 1906-07, 339.7 pounds; 1907-08, 333.7 pounds; 1908-09, 330.6 pounds; 1909-10, 335.5 pounds; 1910-11, 332.1 pounds; 1911-12, 331.2 pounds.

It will be noticed that the average weight per bale is $8\frac{1}{2}$ pounds less than in 1906-07, although 6 pounds more than in 1908-09.

The shipment figures from each State compare as follows with the previous season:

States.	1911-12.		1910-11.	
		Net Weight.		Net Weight.
	<i>Bales.</i>	<i>Pounds.</i>	<i>Bales.</i>	<i>Pounds.</i>
New South Wales....	897,551	294,445,105	923,831	304,864,230
Victoria	562,287	184,459,750	501,835	160,085,365
Queensland	288,515	94,647,812	281,352	92,283,456
South Australia.....	176,985	58,059,929	174,639	56,932,314
West Australia	76,874	25,218,515	73,395	27,449,730
Tasmania	18,335	6,014,796	20,326	5,223,782
Commonwealth	2,020,547	662,845,907	1,975,378	646,838,877
New Zealand.....	493,368	169,915,939	493,372	173,173,572
Australasia.....	2,513,915	832,761,846	2,468,750	820,012,449

Increase, 45,165 bales, or 12,749,397 pounds.

The distribution of purchases in Australasia in the past two seasons has been as follows:

	1911-12.		1910-11.	
	Bales.	Per Cent.	Bales.	Per Cent.
United Kingdom.....	529,051	28	581,467	31
Continent.....	1,207,658	63	1,118,282	60
United States and Canada	65,250	3	44,630	2
Japan, China, and India	25,707	1	18,857	1
Local manufacturers, etc.	99,260	5	101,931	6
	1,926,926	100	1,865,167	100

NEW ZEALAND — SALES — PROSPECTS.

At the New Zealand sales Yorkshire took nearly one-half of the total offerings. Speculators and local scourers bought a large proportion. It might not be out of place to mention that

the American buyers who attended the New Zealand sales found the wools much more to their liking as regards growth and condition than during the previous season, but careless preparation for market in many cases prevented the Americans from bidding for many lots which — had the heavy and cotted fleeces been kept out — would have suited their requirements. They also complained of the get-up of the clip. The reason is simply this: The policy of closer settlement, whilst probably beneficial to that country, and also to Australia (when carried out in a judicious manner), is undoubtedly having a very marked effect on the wool clip. Where in former years there was one mark of, say, 300 bales, shorn from sheep which had been carefully bred and classed for generations, nowadays the same country produces 300 bales of indifferently classed or totally unclassed wool. Unless further steps are taken to educate farmers as regards wool-classing, and also to preserve the best studs of different breeds, so that the smaller growers can buy good sires to improve their flocks, Australia and New Zealand will not forever hold the proud position enjoyed by them for so long as producing the best wool clip in the world.

FIRST AUSTRALIAN SHIPMENT.

The first shipment of wool from Australia was made in 1808, the consignment comprising 245 pounds, which was sold at 10s. 4d. per pound. The first auction sale of Australian wool was in 1820, when 58 bales averaged 3s. 7d. per pound. In 1827 Macarthur's already famous clip sold up to 16s. 4d. per pound.

The shipments since 1808 have been as follows :

<i>Year.</i>	<i>Bales.</i>	<i>Year.</i>	<i>Bales.</i>
1810	98	1900	¹ 1,221,163
1820	422	1905	1,218,969
1830	8,003	1906	1,454,820
1840	44,502	1907	1,663,130
1850	158,558	1908	1,620,890
1860	240,136	1909	1,796,347
1870	673,314	1910	1,921,703
1880	1,054,430	1911	1,975,378
1890	1,509,666	1912	2,020,547
1895	1,802,269		

¹ Heavy decrease owing to drought.

Certainly we don't sell wool at 10s. 4d. per pound nowadays, but Australian wools top the world's markets, so cannot have depreciated in intrinsic value.

The output of wool from Australia has almost doubled in eleven years, but as far as can be seen the limit of production

has been reached. The country is stocked to its full carrying capacity, and the slaughterings for local consumption and export meat trade seem to be a bar to any material increase of the flocks, which during the past six months have been seriously reduced by drought.

TABLE XXI. — AUSTRALASIAN WOOL EXPORTS IN BALES.

Compiled from Customs Returns.

	SEASONS OF				
	1911-12.	1910-11.	1909-10.	1908-9.	1907-8.
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
New South Wales	897,551	923,831	931,208	915,617	856,407
Victoria	562,287	501,835	510,343	454,942	300,390
Queensland	288,515	281,352	238,722	184,207	234,709
South Australia	176,985	174,639	160,573	165,513	143,274
Western Australia	76,874	73,395	63,555	56,785	52,500
Tasmania	18,335	20,326	17,304	19,283	33,610
New Zealand	493,368	493,372	512,938	491,757	436,941
Total	2,513,915	2,468,750	2,434,643	2,288,104	2,057,831

TABLE XXII. — EXPORTS OF WOOL FROM AUSTRALASIA IN POUNDS.

Seasons of 1909-10, 1910-11, and 1911-12.

	1909-10.	1910-11.	1911-12.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
New South Wales	307,598,640	304,864,230	294,445,105
Victoria	165,968,475	160,085,365	184,459,750
Queensland	78,092,094	92,283,456	94,647,812
South Australia	52,206,225	56,932,314	58,059,929
West Australia	23,833,329	27,449,730	25,218,515
Tasmania	5,018,160	5,223,782	6,014,796
New Zealand	184,144,742	173,173,572	169,915,939
	816,861,665	820,012,449	832,761,846

CLASSIFICATION OF AUSTRALASIAN CLIP.

The past clip was composed of 72 per cent merino, and 28 per cent crossbred, a slight increase in the proportion of crossbred as compared with the previous year, when the respective proportions were 74 per cent and 26 per cent.

The breeding of crossbred sheep is decidedly on the increase, and next year the proportion of crossbred to merino will be greater than ever.

The quantity of lamb's wool sold in Australasia during the past twelve months amounts to 93,050 bales, as compared with

98,314 bales for the preceding season, 108,808 bales in 1909-10, 69,456 bales in 1908-09, and 70,980 bales in 1907-08.

The decrease in the quantity of lambs' wool sold during the past two seasons is due to an increased number of lambs' skins shipped in the wool or reduced to scoured wool on this side.

TRANSITION IN THE INDUSTRY.

From a wool user's point of view the rapid manner in which station clips of high repute are being displaced by multitudes of farmers' clips is alarming, and has never been so noticeable as during the past year. Consumers have been frequently warned of this transition in these pages, but wool buyers are only just beginning to realize that good merino clips are going to be very scarce in the near future, and really super wools will be very rare in bad seasons. Closer settlement and the advance of agriculture have not adversely affected the volume of wool produced in Australasia as they have done in other countries, but the intrinsic value of the staple shows a sad falling off. Where, prior to the subdivision of a station, there was one large, well-bred and carefully classed clip, generally of merino growth, there come now from the same country ten or twenty clips, mostly crossbred, and comparatively much inferior to the original brand.

This evolution is going on in all countries, and should result in good wool, more especially merino, materially increasing in value.

The prosperous state of the meat export industry, more especially as regards lambs, has encouraged the breeding of crossbred sheep, which in the southern half of Australia are rapidly displacing the merino, which is being driven further back from the seaboard each year — which makes it very certain that just as soon as a run of bad seasons is experienced in Australia there will be a great scarcity of merino wool. In other countries, such as the Argentine and New Zealand, the merino sheep has almost disappeared, and it is sincerely to be hoped that our old-established studs will never be disbanded. The cry of the man in the street for the compulsory sub-division of all the estates is absurd. Any land which is suitable for wheat-growing will go under cultivation when we have sufficient population, but there is much of the country which gives a better net return per acre by producing the best wool in the world. Furthermore, it would be a national calamity if all the merino studs disappeared. They are an absolute necessity to the sheep and wool industry, and therefore to Australia, for when fine wool becomes so scarce that it will be worth big money, the farmers and graziers will want to breed towards the merino, and there will be all too few fine-wooled sheep available for the purpose.

SOUTH AMERICAN CLIP.

The clip from the Argentine is now almost entirely of cross-bred growth, but liberal importations of stud sheep from Great Britain and New Zealand, together with the greater care given to the get-up of the wool for market is resulting in considerable improvement in the character of the clip.

Uruguay, which country produced during the past year over 61,000 tons, or equal to 411,000 bales Australasian wool, favors merino wool, and that they are determined to improve their flocks is proved by their having a few years ago imported stud sheep from noted Australian flocks, for which they paid up to 1,000 guineas for rams, and 200 guineas for ewes.

SOUTH AFRICA.

The great increase in production in South Africa is illustrated in the following table of figures, which sets out the production each year since 1900:

Year.	Bales.	Lbs.
1900 (war time).....	140,000	.....
1902.....	234,000	.....
1903.....	234,000	.....
1904.....	201,000	.....
1905.....	209,000	.....
1906.....	238,000	.....
1907.....	287,000	108,000,000
1908.....	276,000	101,000,000
1909.....	380,000	138,000,000
1910.....	376,736	125,000,000
1911.....	376,000	125,000,000

The increase in South African production is likely to continue, as fresh country is being stocked with sheep, and the industry, which is officially encouraged in a practical manner, is flourishing.

Latest advices to hand report a good season, but the critical time of the year (the winter) has not yet been passed through; nevertheless, the sheep are in good condition, and there should be no decrease in the coming clip.

Within recent years over 20,000 stud sheep have been secured in Australia by South African pastoralists and farmers, and they have made the clip what it is to-day — a good, increasing merino one, which is competing strongly with Australian wool. The powers that be in South Africa recognize what a splendid industry sheep raising and wool growing is, and the various governments have appointed experts to assist the farmers in the breeding

of their flocks and preparation of their wool. The necessary experts they obtained from Australia. They have gone even further, for besides supplying the settler with stud sheep from Australia, and appointing a number of experts, they have encouraged an improvement in the get-up of their wool by granting preferential railway rates on all wool which has been shorn, sorted and baled in accordance with regulations drawn up by the Department of Agriculture.

BRITISH EAST AFRICA.

The territory of British East Africa, which until recently was not considered suitable sheep country, is being used for sheep, which are doing well there. So far, most of the 5,000,000 sheep in British East Africa consist of native sheep, which produce a light fleece of very poor quality, but, as in South Africa, high-class Australian merinos are being imported freely, and the results achieved by crossing them with the inferior native stock have been marvellous.

EXTENSION OF WOOL-GROWING TERRITORY.

Siberia has frequently been mentioned by travelers as a country destined to produce large quantities of merino wool, and if we wish to encourage further competition in wool production there should be a big field for our stud merinos in that rich country. At present there are only two types of sheep in Russia. The coarse-wooled type differs in appearance in various sections of the country, but it preserves its ordinary characteristics and yields about the same quality of fleece the country over. There are varieties of colors, but the wool of all types is coarse, matted, and dirty. Some districts produce sheep with longer fleeces, but with that exception the quality does not vary. These sheep are small and yield up to 9 pounds each, the average being about 4 pounds. In the Asiatic sections and in some parts of southern European Russia the flocks consist principally of the fat-tailed sheep. The merinos are the sheep brought about by the introduction many years ago of the Spanish types. These flocks are comparatively small and are not increasing. The wool produced by them is much superior in texture, and brings a much better price in the local markets.

The German government, with the coöperation of many prominent wool merchants and manufacturers, is stated to be establishing stations in German Southwest Africa, where the best sheep will be raised and furnished at low prices to the farmers there for the improvement and enlargement of their flocks.

TRADE FOR THE EAST.

The wool demand for Japan and the East is a growing one, and is of the utmost importance to Australia on account of the

great possibilities of trade in that direction, as Japan can never become a wool growing country. There are plenty of hills and mountains with only 15 per cent of the land under cultivation, but it is not possible as grazing country, for it is densely covered with bamboo grass, which cannot be eradicated.

An admission made by the Japanese Minister for Agriculture and Commerce is to the effect that the Government has made every endeavor to improve the flocks, but without any tangible results. New blood had been introduced from England and other countries, the object being to meet the local demand by creating a better local supply. It was also thought that a system of sheep culture similar to that practised in England could be introduced, but the decision arrived at after five years' experimentation is that Japanese wool users will have to depend upon Australia to provide them with the raw material.

WOOL SHIPMENTS TO JAPAN.

The following figures give the shipments of wool from Sydney to Japan during the past 22 years :

Season.	Bales.	Season.	Bales.
1890-1.....	200	1902-3.....	2,654
1893-4.....	500	1903-4.....	6,550
1894-5.....	1,388	1904-5.....	10,727
1895-6.....	4,454	1905-6.....	4,931
1896-7.....	1,668	1906-7.....	22,174
1897-8.....	3,368	1907-8.....	7,954
1898-9.....	4,057	1908-9.....	8,363
1899-1900.....	4,262	1909-10.....	18,674
1900-1901.....	2,456	1910-11.....	16,168
1901-2.....	1,982	1911-12.....	20,002

Japan seems to have more or less deserted the good scoured merinos, which at one time monopolized her attention, and now takes greasy super merino free from burr, both fleeces and bulky skirtings.

A total quantity of 25,707 bales representing the Australian purchasers for Japan, China, and India for the past wool year does not constitute a very big demand, but, nevertheless, Japanese competition is specially welcome, because everything points to a rapid expansion in the near future, more especially as they now thoroughly understand the manufacture of woolen goods. They have learned to blend the superior wools of Australia with cheaper supplies obtainable nearer home, and thus put our wool to profitable use, and this is exemplified by the fact that during the past two seasons the highest priced greasy wool sold in New South Wales was bought for Japan, 16½d. and 16d. per pound

respectively being paid by Japanese representatives for choice New England merinos.

INCREASING DEMAND FOR WOOLEN GOODS IN THE EAST.

The most pleasing aspect of the matter is that the people of Japan are taking readily to European dress. The workmen prefer a woollen singlet to a cotton one, and as their position gradually improves so the demand will increase for woollen goods, and in addition woollen fabrics are being used for kimonoas to a very large extent. When one realizes the teeming millions of the East and that China is awakening and following in the footsteps of Japan in the use of all wool clothes for her army and navy, the enormous possibilities of our trade in wool with the East become apparent, though of course there can be no rapid development as regards China, whose wants will be attended to by the more advanced Japanese manufacturers; but every little counts, and our wool trade with Japan at all events will more rapidly increase in the future than it has done in the past.

UNITED STATES CONSUMPTION.

The United States is far and away in advance of any of the other great nations in the consumption of wool, for although behind the United Kingdom in the quantity required for her factories, all that is manufactured is retained there for local consumption, in addition to which vast quantities of woollen fabrics are imported from abroad. There are over 2,000,000 spindles in the American worsted mills alone, and with these running full time for a year the mills would require almost 500,000,000 pounds of raw wool or equal to 1,500,000 bales, say, 60 per cent of the total Australasian production.

THE WOOL OUTLOOK.

There are several factors which are likely to have an important bearing on the course of the wool market during the ensuing twelve months, the first of these being the certainty of diminished Australian wool production owing to the severe, though short, drought recently experienced throughout most of the wool-growing districts of the Commonwealth. Another is the great probability of a revision of the American wool tariff in favor of oversea woolgrowers. The third is the fact of favorable trade conditions generally, practically only affected at the present time by industrial troubles.

The first cause to which we have referred as likely to affect the position, viz., reduced wool production in Australia, must be an important one, as apparently nothing can prevent the sheep numbers from showing at the next collection of returns a reduction on the figures taken twelve months previously. It is natural, perhaps, that there should be a good deal of scepticism on the

part of wool consumers with respect to estimates indicating a loss of sheep or falling off in production. After going carefully into the matter and securing information from all the available sources, we give as our forecast that the Australasian clip in the 1912-13 season will show a deficiency of 250,000 bales on the exports of the previous wool year. The splendid general rains of late and the marvellously mild weather which has followed them have immensely improved the pastoral position, but cannot wholly repair the damage done so far as the coming season's wool clip is concerned.

Table XXIII., on the following page, presents a statement of the world's wool production, compiled from the latest official reports and estimates, from which it appears that the total is not less than 2,971,000,000 pounds. Of this the United States furnished one-ninth, Argentina somewhat more, Uruguay not quite one-third as much as Argentina, while Australia furnished an amount greater than these combined or 833,000,000 pounds, a quantity 19,000,000 pounds in excess of the total production of all Europe including the United Kingdom. Including South Africa, which furnished about 125,000,000 pounds, these countries supply nearly all the merino and English blood wools. Most of the wools from Asia, some from Europe, and many from South America, are of a coarse low grade, used generally for making carpets, common blankets and similar goods.

The table on page 402 contains the official statement, subject to revision, of the imports of wool and wool manufactures entered for consumption. This table is the one generally most acceptable for statistical purposes, for it shows the actual quantities and values of foreign goods that go into distribution yearly through the merchants of the country.

WM. J. BATTISON.

TABLE XXIII. — WOOL PRODUCTION OF THE WORLD.

From the Latest Official Returns and Estimates.

COUNTRY.	WOOL.
	<i>Pounds.</i>
North America:	
United States	302,343,400
British Provinces	11,210,000
Mexico	7,000,000
Central America and West Indies	1,000,000
Total North America	321,553,400
South America:	
Argentina	368,151,500
Brazil	1,130,000
Chile	27,745,080
Peru	9,940,000
Falkland Islands	4,324,000
Uruguay	138,332,375
All other South America reported	5,000,000
Total South America	554,622,955
Europe:	
United Kingdom	142,877,011
Austria-Hungary	41,600,000
France	78,000,000
Germany	25,600,000
Spain	52,000,000
Portugal	10,000,000
Greece	14,000,000
Italy	21,500,000
Russia (Europe)	320,000,000
Turkey and Balkan States	90,500,000
All other Europe	18,000,000
Total Europe	814,077,011
Asia:	
British India	60,000,000
China	50,000,000
Russia (Asiatic)	60,000,000
Turkey (Asiatic)	90,000,000
Persia	12,146,000
All other Asia reported	1,000,000
Total Asia	273,146,000
Africa:	
Algeria	33,184,000
British Africa	125,000,000
Tunis	3,735,000
All other Africa reported	13,000,000
Total Africa	174,919,000
Oceania:	
Australia	662,845,907
New Zealand	169,915,939
Australasia	832,761,846
All other Oceania reported	100,000
Total Oceania	832,861,846
Total world	2,971,180,132

"IMMIGRATION AND LABOR."

A NOTABLE DEFENCE OF THE ECONOMIC VALUE OF THE
NEW-COME MILLIONS OF WAGE-EARNERS.

AN important book appears from the house of G. P. Putnam's Sons, New York and London, on "Immigration and Labor" — a study of immigration into the United States from the economic standpoint. The author, Isaac A. Hourwich, Ph.D., deals with his theme with a moderation and sincerity which cannot but command admiration. His conclusions challenge many of the current notions of the day. Summarized, the results of his discussion are as follows:

(1.) Recent immigration has displaced none of the native American wage-earners or of the earlier immigrants, but has only covered the shortage of labor resulting from the excess of the demand over the domestic supply.

(2.) Immigration varies inversely with unemployment; it has not increased the rate of unemployment.

(3.) The standard of living of the recent immigrants is not lower than the standard of living of the past generations of immigrants engaged in the same occupations. Recent immigration has not lowered the standard of living of Americans and older immigrant wage-earners.

(4.) Recent immigration has not reduced the rates of wages, nor has it prevented an increase in the rates of wages; it has pushed the native and older immigrant wage-earners upward on the scale of occupations.

(5.) The hours of labor have been reduced contemporaneously with recent immigration.

(6.) The membership of labor organizations has grown apace with recent immigration; the new immigrants have contributed their proportionate quota to the membership of every labor organization which has not discriminated against them, and they have firmly stood by their organizations in every contest.

Dr. Hourwich says at the outset of his book that "It is recognized on all sides that the present movement for restriction of immigration has a purely economic object: the restric-

tion of competition in the labor market. Organized labor demands the extension of the protectionist policy to the home market in which 'hands' — the laborer's only commodity — are offered for sale. The advocates of restriction believe that every immigrant admitted to this country takes the place of some American workingman." "Every objection," he adds, "to the immigrants of Southern and Eastern Europe is but an echo of the complaints which were made at an earlier day against the then new immigration from Ireland, Germany, and even from England. Three-quarters of a century ago, as to-day, the only good immigrants were the dead immigrants."

The author vigorously combats the idea that the immigrants of to-day are drawn from a poorer class than their predecessors. He urges that prior to 1820 the great majority of immigrants were too poor to pay their passage and had to work it out in practical servitude after arrival in this country. The next generation, of Irish and German immigrants, was not much better off. Since immigration has begun to come from Southern and Eastern Europe, steerage rates have been doubled, "the increase being equivalent to a heavy head tax." Therefore, Dr. Hourwich argues, the present immigrants must be better off financially than those that came before, and he cites figures to show that the illiteracy of the newcomers is now much lower among the immigrants than among their countrymen who stay at home — "something that may be accepted as evidence that economically the immigrant must be above the average of his mother country."

The prevalent belief that Slay, Italian, Greek, Syrian, and other mill and mine workers have been "imported" by capitalists is baseless in the judgment of the author. "None of the official investigations of immigration," he says, "has disclosed any evidence of importation of laborers under contract on a large scale, although prior to the enactment of the law of 1885 excluding contract laborers, there was no reason to conceal the fact. It is quite conceivable that in the case of a strike a great corporation might have resorted to the importation of a large force of strikebreakers regardless of cost. As

a general rule, however, with hundreds of thousands of immigrants coming to this country annually, it would be a waste of money to 'induce' immigration. The few actual violations of the contract labor law that elude the vigilance of the immigration authorities cannot affect the labor market." And Dr. Hourwich adds :

The real agents who regulate the immigration movement are the millions of earlier immigrants already in the United States. It is they that advance the cost of passage of a large proportion of the new immigrants. When the outlook for employment is good, they send for their relatives, or encourage their friends to come. When the demand for labor is slack, the foreign-born workman must hold his savings in reserve, to provide for possible loss of employment. At such times no wage-earner will assume the burden of providing for a relative or friend, who might for a long time be unable to secure employment. It is in this way that the business situation in the United States reacts upon the volume of immigration. The fluctuating supply of immigrant labor, like that of any other commodity, may sometimes outrun the demand and at other times lag behind it, yet, if we compare the totals for industrial cycles, comprising years of panic, of depression, and of prosperity, within the past sixty years, we find that the ratio of immigration to population has been well-nigh constant. In the long run immigration adjusts itself to the demand for labor.

Another frequent criticism of the immigrants, that accustomed as they are to lower standards of living than Americans they underbid and displace American workers, is interestingly treated by the author of this important work. "If this view were correct," he says, "we should find in the first place a higher percentage of unemployment among the native than among the foreign-born breadwinners. Statistics, however, show that the proportion of unemployment is the same for native and foreign-born wage-earners. The immigrant has no advantage over the native American in securing or retaining employment. In the next place, we should find more unemployment in those sections of the United States where the immigrants are most numerous. In

fact; however, the ratio of unemployment in manufactures is the same in the North Atlantic States with a large immigrant population as in the South Atlantic States where the percentage of foreign-born is negligible. Coal miners are thought to have suffered most from immigration. Yet it appears that Pennsylvania, which is among the States with the highest percentages of foreign-born miners, has the second lowest percentage of unemployment. The highest ratio of unemployment, according to the latest published census data, was found in West Virginia, where the percentage of foreign-born miners was next to the lowest. A similar relation between unemployment and the proportion of immigrants is observed among cotton-mill operatives and common laborers: immigrants are not attracted to those States where opportunities for regular employment are less favorable. Furthermore, if there existed a causal connection between immigration and unemployment, there should have been more unemployment in those years when immigration was greater, and vice versa. The figures show, on the contrary, that there was less unemployment during the first seven years of the present century with immigration at a high tide than during the preceding decade when immigration was at a low ebb."

The accusation that the immigrants will not go on the farms, but prefer to stagnate in the overcrowded cities is a charge which, as Dr. Hourwich points out, cannot be levelled against the immigrants alone. "For the past ninety years," he writes, "public men and social theorists have sought to relieve unemployment in the cities by directing the current of immigration to the farm, but the immigrants have already preferred to seek employment in the cities. The popular mind which accounts for individual conduct by the 'free will' of the individual applies the same criterion to social phenomena: the Italians and the Slavs concentrate in the cities because they have a 'racial tendency' to concentrate in the cities. That most of the immigrants of those nationalities have grown up in agricultural communities and that many of them after working a few years in a great

American city return home and go back to the soil, argues against the assumption of a 'racial' dislike for agriculture. The real cause of the concentration of immigrants in the cities is economic. Even the 'desirable' immigrant from Northern and Western Europe who lands with a capital of fifty and odd dollars lacks the funds to rent a farm. At best he can obtain employment only as a farm hand. Since the early days of Irish and German immigration, however, the growing industries of the cities have offered a better market for labor than agriculture.

"The industrial development of the United States has manifested itself in a relative, and in some sections an absolute, depopulation of rural territory. There is a large migration of native Americans of native stock from country to city. This movement is the result of the revolution in American farming conditions and methods, which has tended to reduce the demand for labor on the farm. The American farm of the first half of the nineteenth century was the seat of a highly diversified industry. The members of a farm household made their own tools and part of the furniture; they were spinners and weavers; they made their own clothes, and soap and candles for their own use. With such a variety of occupations there was work for a hired man at all seasons of the year. But industrial differentiation has removed from the farm one industry after another. The time during which a hired man can be kept employed on the farm has been reduced in consequence to a few months in the year. Still, until the middle of the nineteenth century the mills were quite commonly run by water power, which made for decentralization of manufactures. The small country towns accordingly offered to the farm laborer a prospect of employment when work was scarce on the farm. But the general substitution of steam for water power led to the removal of factories from small towns to great commercial centers. The opportunity to earn a full year's wages in a rural community was gone."

Neither have the immigrants injured American labor by displacing it. "The majority of Americans of native parent-

age are engaged in farming, in business, in the professions, and in clerical pursuits. The majority of the immigrants, on the other hand, are industrial wage-earners." "As a rule, the supply of immigrant labor has been absorbed by the increasing demand for labor in all industries without leaving a surplus sufficient to displace the native or older immigrant wage-earner." "The places left vacant by the old employees who have gone westward would have to be filled by new immigrants." "The social stigma attaching to working association with immigrants is not the cause but the effect of the desertion of the mills and factories by native American women." "For every native woman of American parentage who left the mill or clothing factory there were forty women of the same nativity who found new openings. The increase of the number of native American professional women was nearly five times as great as the decrease of the number of native American factory girls. The marvelous progress of the American educational system has fitted the native American woman for other work than manual labor and has at the same time opened to her a new field in which she does not meet the competition of the immigrant."

American-born workmen are markedly increasing, not decreasing, in most of the country's principal industries. "Such States as Pennsylvania and Illinois show large gains in the number of native miners, both of foreign and of native parentage." In the iron and steel mills of recent years "the number of American-born employees of every nativity has more than doubled." "The effect of immigration upon the occupational distribution of the industrial wage-earners has been the elevation of the English-speaking workmen to the status of an aristocracy of labor, while the immigrants have been employed to perform the rough work of all industries."

The theory of the late General Francis A. Walker, that the immigrants have had an influence in reducing the birth-rate in the United States and "have displaced unborn generations of native Americans" is vigorously combatted by Dr. Hourwich. He insists that the declining birth-rate is a world-wide social phenomenon. In the Australian common-

wealth, with her vast continent as yet unsettled, with a purely Anglo-Saxon population and practically no immigration, the decline of the birth-rate has been as rapid as among Americans of native stock.

Most of the present immigrants are unskilled laborers, but so were the immigrants of the earlier times. "The number of skilled mechanics has at no time within the past fifty years been as high as one-fourth of all immigrant breadwinners." "Invention of machinery has had the tendency to reduce the demand for mechanical skill, and most of that demand has been supplied by native Americans."

As to standards of living and expenses, "meat, the most expensive article of food, is consumed by the Slav in larger quantities than by native Americans." "The living expenses of the native American workman in small cities and rural districts are lower than those of recent immigrants in great industrial centers."

"The Immigration Commission after a study of the earnings of more than half a million employees in mines and manufactures, has discovered no evidence that immigrants have been hired for less than the prevailing rates of wages."

On the contrary, wages are very much higher now than they were once, in the great characteristic industries which employ recent immigrants. "Throughout the second quarter of the past century native American and Irish women worked in the sweatshops in New York, Boston, and Philadelphia for only board and lodging or even for board alone, depending on their families for other necessities, whereas the Jewish factory girls of the present day are at least self-supporting." The same thing holds true in the great textile industries. "In the cotton mills of New England the last quarter of the nineteenth century, when the operatives were practically all of the English-speaking races, was a period of intermittent advances and reductions in wages; on the whole, wages remained stationary. The first years of the present century, up to the crisis of 1908, were marked by the advent of the Southern and Eastern Europeans into the cotton mills, and by an uninterrupted upward movement of wages. The com-

petition of the cheap American labor of the Southern cotton mills, however, tends to keep down the wages of the Southern and Eastern European, Armenian, and Syrian immigrants employed in the New England mills."

"Going back to the beginnings of the factory system in the United States, when the operatives were sons and daughters of American farmers, we find that the hours of labor in the factories were from sunrise to sunset, the same as on the farms to-day. The retirement of the native element and their replacement by Irish immigrants was followed by a reduction of the hours of labor in the textile mills. In recent years the mills have been run with a polyglot help made up of representatives of all the races of Southern and Eastern Europe and Asiatic Turkey. Compared with the time when the operatives were mostly Irish, the factory workers have again won a reduction of an hour and a quarter a day."

Instead of menacing organized labor, the new immigrants, Dr. Hourwich contends, "are the backbone of some of the strongest labor unions." "The families of recent immigrants, being inured to the most simple life in their home countries, can more easily endure the hardships of a strike than the families of native American wage-earners."

Dr. Hourwich emphasizes this point by a chapter devoted to the recent textile strike at Lawrence, where the most conspicuous revelation is held to be the fact that a "great host of recent immigrants, representing a number of supposedly alienated nationalities," proved their ability to hold together in "continuous, effective solidarity." Wages in the Lawrence mills are shown to have remained stationary from 1889 to 1899 but to have increased greatly in the decade between 1899 and 1909, during the period of the great influx of immigrants from Southern and Eastern Europe. In all this time the percentage of increase in the wages of unskilled operatives has been greater than the percentage of increase in the wages of skilled workers, practically all of the English-speaking races.

It is the aim of Dr. Hourwich in his careful and compre-

hensive work to convince the American people of the unsoundness of the current economic arguments for restricting immigration. He marshals facts and figures most impressively to show that industrially the income of millions of "new" immigrants has been a great blessing and not a curse to the United States. The work appears at an opportune time, when the immigration question is actively receiving the attention of Congress and when the great industries of the country are suffering from a deficit of willing laborers. The work is written in a fair and temperate spirit and, though the style is necessarily dogmatic, every assertion is buttressed by specific proof. The book is one of particular interest to manufacturers and other great employers of labor, skilled or unskilled. It is certain to have a deep impress on the current discussion of the immigration problem.

DID BROAD PROTECTION PAY?

A TRULY NATIONAL POLICY THAT HAS HELPED TO BRING
CLOSER TOGETHER NORTH AND SOUTH.

DURING the discussions preceding the tariff of 1883 some Republicans felt that too much consideration was given to Southern interests. Now and then a partisan would murmur, "Cut their duties. If they were in power they would cut us down to the starvation point. Why should we protect them?" If a Republican has forgotten this talk or if he is too young to remember it, let him rest assured that such talk was heard. There is no need to republish it; it would be more profitable to re-read the speech wherein Senator Cameron declared that he wished to see Protection do for the South what it had done for Pennsylvania. Judge Kelley's memories of the old Bourbons included a speech interrupted by flying eggs, but he rejoiced to see growing Southern industry with the natural result of better wages for colored workmen. Southerners whose fathers had lost their slaves and whose mothers had taught them to hate the military governors looked on with amazement. Right and left things were changing for the better, Northern capital was buying Southern land, Northern machinery was consuming Southern raw material, and Northern men were coming South, not as soldiers, not as office-holders, but as business managers and buyers of homes.

This did not make a Republican South, it did not prevent Cleveland's success in 1884, but it softened the old bitterness of the unreconstructed! How courteously Southern audiences listened to Randall, how forcefully Henry W. Grady argued for Protection, how boldly Southern men said that to go without a good tariff in peace would be as foolish as to go without a strong navy in war! Mills failed to pass his tariff bill, and well is it that he failed, yet even that bill shows a long list of concessions to the growing Protectionist sentiment below Mason and Dixon's line. Even Mills in 1888

was not as radical or as vindictive as he would have been ten years earlier.

In 1890 tariff leadership was in the hands of the benevolent McKinley and Congressional machinery in the hands of the energetic Reed. The cry to strike at the South was heard again. One prominent Republican paper (it has learned wisdom since) began a line of seesaw editorials, now saying that a duty on iron benefited the wage-earner, now saying that a duty on rice merely benefited the planter. But the Republican party, as a whole, took the broad view — the only logical view. If Protection helps the white man who works in a furnace and is menaced by British or Belgian competition, then it also helps the black man who must encounter the competition of China. If it does not do anything for the negro on the plantation then it does not benefit the white wage-earner. Economic laws are not affected by political or racial lines. The McKinley tariff dealt fairly with the South, and the genial old Ohio Democrat, Henry B. Payne, said: "It's not a bad bill; the duties are about 15 per cent too high, but that is all." The Southerner at the cross-roads tavern might still talk about "the oppressed South;" the Southerner who was doing well in lumber, iron, fruit, or manufactures had less and less sympathy with this old cry.

Under Cleveland there was, it is true, a lower tariff; it did a great deal of harm, and it breathed the spirit of revenge. But how mild the Southern tone was as compared with the wild spirit that in Seymour's day clamored for repudiation, the mad Bourbonism that Tilden feared, the Secessionist feeling that sullenly gulped down the nomination of Hancock. Southern Senators who voted for the tariff of 1894 were glad that Quay and Gorman cut out its worst features. It is not remarkable that some of the old-time bitterness remained; we ought to be glad that there was not more of it. From the Chesapeake to the Rio Grande there were investors and landowners who said: "The Republicans gave us a chance to live; we ought not to cut their throats." With breadth mingled policy; a large number of wage-earners were Democrats and it hardly paid to throw them

out of work. If Northern capitalists were driven into bankruptcy they could not make any further investments down South. The facts were slowly modifying the theories. If Lee had taken Philadelphia and New York he would certainly have exacted contributions that would have kept the South afloat for a little time, and he might have won recognition of the Confederacy from France and England. But 1894 was not 1863 — injury to the North would not help the South — after all, Webster uttered more than a fine phrase when he said that our republic was “diverse as the billows, yet one as the sea.” Years earlier a Virginia President had argued that sectional jealousies hurt the whole Union. The leaven of a broad Americanism was at work.

Nelson Dingley found that in both Houses Southern Democrats were ready to aid him in building up schedules. Others, who disapproved of the measure as a whole, heartily indorsed a large part of it. Men who, on partisan grounds, voted against the Dingley bill, yet abstained from all filibustering tactics. Probably the most effective political contrast of the last twenty-five years would be to put on one side Gorman’s stubborn resistance to the Federal Elections bill, and on the other the absence of deep hostility to the Dingley measure. It would seem that the opposition merely fired a volley, and fell back in good order.

The outspoken language of Senator Daniel, of Virginia, and Senator McEnery, of Louisiana, in favor of nation-wide Protection has been quoted by a hundred journals. But more significant than the avowed belief of a Southern Senator or Congressman here and there is the changed tone, the willingness to debate the question, the readiness to see that a great enduring policy is not to be overthrown in a day. Morgan, of Alabama, in praising the memory of Morrill, openly dissented from his tariff views, yet added that the growth of our manufactures was something “of which we are all very proud.” The sting of antagonism was gone or Morgan would not have said this. It is not thirty years since an Ohio Democrat could say that he would rather plant a cancer germ in a hospital than endow a college in which Protection was

taught. Few Southerners of reputation would say that now. Five years hence this talk will sound as belated as the complaints of sundry wild-eyed Texans that their school history contains a picture of Abraham Lincoln.

Has not Protection done much to lessen the old bitterness between North and South? Is it not a historical fact that the Republican campaign of 1880, begun on the bloody shirt, was so disastrous that Garfield owed his success to the shrewdness that substituted the tariff issue? The Protective system has convinced the South that the Republican party stands for something better than bayonet rule and carpet bag administration. Now the Democrats have come into power again, and is it not a patent fact that they are less radical in tone than any one expected? Does any Democrat of national repute talk of challenging the protected interests to a "fight for extermination"? The President-elect speaks as if moderation were to guide his counsels. Railroads and factories, mines and forests, may expect reductions, perhaps some foolish ones, but the old hatred of manufacturing industry is subsiding. The Southerner of to-day cannot hate the Republican party as the White Leaguer hated it. Should the Republican party follow the Federalists and the Whigs yet its broad policy of protecting the country as a whole may live in the minds of future Congresses and future Administrations. A broad policy has paid, and the Democrats of the South would rather build up a mighty traffic for the Panama canal than ruin the industries of the North. On high ground, it will read better in history; on low ground, it will pay better in 1916.

ROLAND RINGWALT.

Obituary.

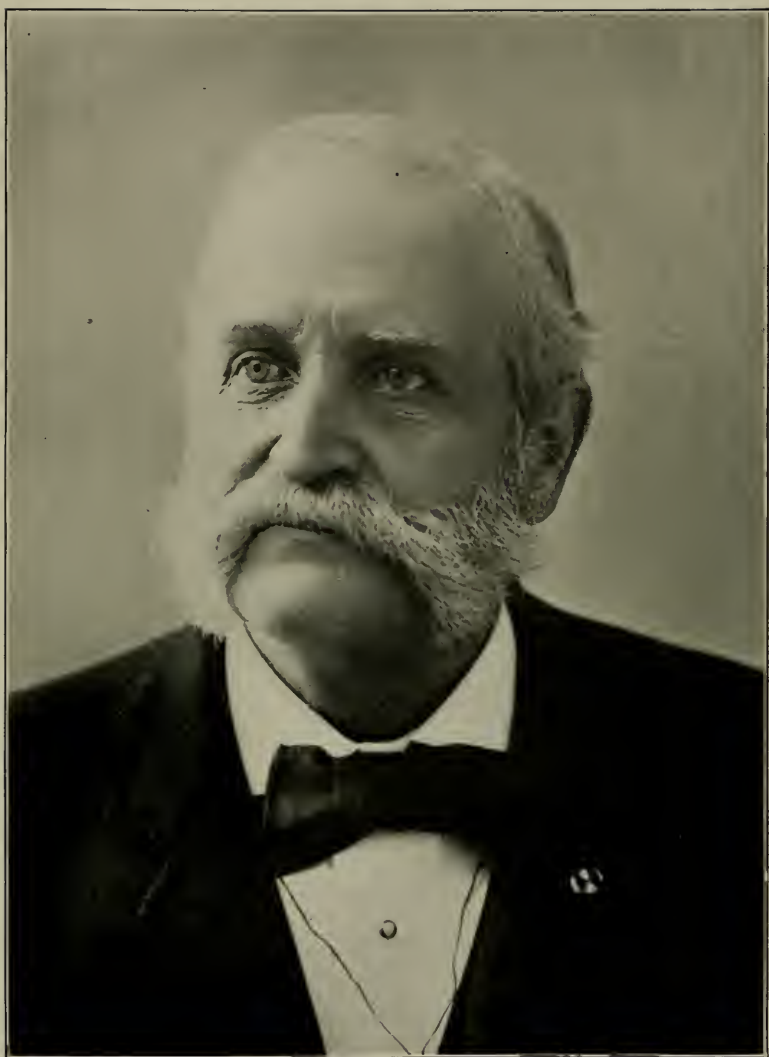
MAJOR CHARLES A. STOTT. (*With portrait.*)

MAJOR CHARLES A. STOTT, of Lowell, Mass., long a member of the National Association of Wool Manufacturers and an influential factor on the Executive Committee, died on October 31, ending a long, active, and honorable career. He was a native of Dracut, near Lowell, Mass., and was born on August 13, 1835. His father, Charles Stott, was a woolen manufacturer at Dracut and Lowell, identified with the Belvidere Woolen Mills and the Stirling Mills — the latter establishment the elder Stott founded.

Charles A. Stott received an excellent training in the Lowell schools, and at twenty-one became the clerk and paymaster in the Belvidere Woolen Mills, where his father was agent and treasurer. The young man was Captain of a Lowell company in the Sixth Regiment of the Massachusetts Volunteer Militia before the Civil War, and on the breaking out of the war was commissioned as Major of the regiment. Returning from the war he reentered the manufacturing business, and in 1882 he succeeded his father as agent and treasurer of the Belvidere Woolen Mills.

Major Stott throughout his life was one of the most conspicuous and useful citizens of Lowell, of which city he was the Mayor in 1876 and 1877. He had also been a member of the Massachusetts House of Representatives. In 1881 and 1882 Major Stott was the chairman of the Republican State Committee, and in 1884 he was a Presidential elector. He stood high in the Masonic Order, and was Past Grand Commander of the Grand Commandery, Knights Templars of Massachusetts and Rhode Island. He was a member also of the Grand Army and the Loyal Legion.

The cause of protection always appealed to Major Stott. For more than twenty years he was an active member of the Home Market Club, and for a large part of this time a member of the Executive Committee. In 1895 he was elected president of the club and reelected in 1896. In his religious faith Major Stott was a Congregationalist, an attendant at the High Street Church



Wm. A. Felt

in Lowell. He was married first to Mary E., daughter of George W. Bean, of Lowell, who died in December, 1860, leaving one daughter, Lilla A. Several years later Major Stott was married to Lizzie Williams, of Concord, N.H., who survives him, with four children — Mrs. Frank W. Howe, Miss Edith Stott, Mr. Charles W. Stott, and Miss Marion Stott.

A large gathering of devoted friends attended the funeral of Major Stott at the family home in Lowell on Sunday afternoon, November 3. As a Lowell journal said of him, "Few men have been more generally beloved." Major Stott was a frank, genial, soldierly gentleman and an alert and capable man of business. He will be keenly missed by his fellow-manufacturers.

At a meeting of the Executive Committee of the National Association of Wool Manufacturers at the Hotel Touraine, Boston, on December 6, 1912, the following resolutions on the death of Major Stott were presented by Mr. Frederic S. Clark, President of the Talbot Mills and Vice-president of the Association, and unanimously adopted :

Resolved, by the Executive Committee of the National Association of Wool Manufacturers, that we record the great loss which the Association and the industry have sustained in the death of one of the most distinguished men of our calling, Major Charles A. Stott, of the Belvidere Woolen Mills of Lowell, Mass., a citizen of notable public spirit, a gentleman of courtly and winning character, and a brave soldier of the Civil War.

Resolved, that this expression of our grief at his death and our profound sympathy with his family and his associates be entered on the records of the Association and published in the quarterly Bulletin.

CAPTAIN AMOS BARTLETT.

CAPTAIN AMOS BARTLETT, of Webster, Mass., long the manager of the extensive Slater Woolen Mills and a trustee of the Slater estate, died on November 30 at the age of seventy-six years. He had passed almost his entire life in Webster. He was a native of the town, a graduate of its public schools, and a graduate of Wilbraham Academy. Captain Bartlett was the principal of the High School in his home town in 1861, when he left the school teacher's desk to enlist in Company I of the Fifteenth

Massachusetts Volunteers. He was promoted successively to Second Lieutenant, First Lieutenant and Captain — gaining this rank on March 21, 1862. He was finally compelled to leave the army because of a wound received in the terrible battle of Antietam.

Returning from the war Captain Bartlett engaged actively in town affairs at Webster. He was a member of Nathaniel Lyon Post of the Grand Army, and a selectman of Webster for three years. As manager of the Slater Mills he was appointed a trustee of the Slater estate upon the death of Horatio N. Slater, thirteen years ago. Captain Bartlett was a member of the Church of the Reconciliation. He gave the chimes for the new Webster High School in honor of his father, Asa Bartlett, and was active in the erection of the Soldiers' Monument. Captain Bartlett leaves a wife, Emma Spaulding Bartlett; two sons, Spaulding Bartlett, of Cambridge, formerly superintendent of one of the Slater Mills and now connected with the American Felt Company, and Sydney K. Bartlett, formerly assistant superintendent of the Slater Mills, and a daughter, Miss Lucia Bartlett. A brother of Captain Bartlett, Edwin Bartlett, is a manufacturer in North Oxford.

Book Notice.

THE BLUE BOOK.

THE "Blue Book Textile Directory," in its twenty-fifth annual edition, 1912-1913, contains a separate list of 376 new mills and firms that have been added this year to the several classifications. The office edition of this directory contains more than 1,100 pages, and the pocket edition about 950 pages. The salesmen's edition includes 350 pages. The work is well printed and well arranged, and is particularly adapted for quick reference. Textile maps show all towns in which textile or dye, print, or bleach works are located.

The publishers are the Davison Publishing Company, 407 Broadway, New York.

Editorial and Industrial Miscellany.

THE NATIONAL ELECTION OF 1912.

NO INDORSEMENT OF TARIFF FOR REVENUE ONLY.—
PROTECTIONISTS, IF UNITED, WOULD HAVE WON.

PRESIDENT-ELECT WILSON is a minority President of the United States. Because of the unfortunate division in the Republican protectionist party, he will receive an enormous majority in the electoral college, but Mr. Wilson actually polled only 6,156,748 votes in the country at large as compared with the 6,393,182 given to Mr. Bryan in 1908. The tariff-for-revenue-only party has not increased, but has actually dwindled in the past four years. President Taft received 3,376,422 votes in the late election, and Colonel Roosevelt, 3,928,140. The protectionist party thus almost equally divided polled together 1,147,814 votes more than did the Democratic party solidly supporting Mr. Wilson.

These are significant figures that ought to chill any fervor for radical tariff legislation in the new Congress which Mr. Wilson announces he will call in extraordinary session early next spring. A decisive majority of the American people have declared unmistakably that they do not believe in the tariff-for-revenue-only policy so boldly enunciated in the National Democratic platform. Both President Taft and ex-President Roosevelt were known by the entire country to be adherents of the protective principle, and this principle was formally indorsed by the followers of both when they were placed in nomination. The Democratic managers made much of this fact, insisting in their speeches and their newspapers throughout the campaign that a vote for either Taft or Roosevelt was a vote for the maintenance of the protective idea. Therefore, on the explicit confession of the champions of tariff-for-revenue-only, their cult has commanded the support of only a minority of the fourteen million American citizens who recorded their opinions at the polls on November 5, 1912.

Few or no free traders voted for President Taft and few or

none for Colonel Roosevelt. On the other hand, it is perfectly well known that among the habitual supporters of the Democratic party, especially in the great northern industrial States, are hundreds of thousands of laboring men who are thorough-going protectionists in their personal belief, but act with the Democracy under an impression that on other matters than protection it is more distinctively "the party of the people." Moreover, President-elect Wilson undoubtedly received the ballots of many thousands of Republicans of a conservative type, who voted for him, without any favor for his tariff ideas, as the quickest and surest way of defeating Colonel Roosevelt. These Wilson Republicans who did not believe in tariff-for-revenue-only at all may have been offset in numbers by Democratic wage-earners and farmers who supported the Roosevelt ticket, but making this concession it remains true and undeniable that the extreme doctrine of tariff-for-revenue-only borrowed into the Democratic platform from the old nullificationists and the Confederate Constitution conspicuously failed to secure the approval of a majority of American citizens.

There is every indication on the face of the returns that if the protectionist party had remained united instead of splitting into two nearly equal and wholly ineffective parts, it would have won the Presidency last month, held the Senate and regained control of the House of Representatives. That makes the Democratic victory a victory of chance. It implies no mandate of the people to go on with the destruction of the protective policy and the grave injury of the national industries dependent on it. So far as any mandate is visible at all in the returns of the late election, it is in the form of a decisive majority vote for the two candidates of the party that has always stood unwaveringly for protectionism.

It remains to be seen just what effect a sober analysis of the election figures will have upon the leaders of the new Democratic Congress that will be in session five months hence in Washington. Those figures ought certainly to impress the need of moderation and prudence. Dissatisfaction with an existing tariff law is one thing, and acquiescence in or indorsement of a policy of free trade or tariff-for-revenue-only is quite another. History is inclined to repeat itself very much after this fashion in our economic and political affairs. A new protective tariff

law is passed. It is not perfect; all of its rates cannot be made to suit divers and often conflicting interests. A great hue and cry is raised against the new law as discriminatory or extortionate by those who are or who imagine that they are offended by it. The men who do like the law promptly and loyally go to work to do business under it, leaving the arena of public discussion to the disgruntled, who, having nothing else to do, proceed to rend the skies with epithets and denunciation. All of this admirably suits the sensational purpose of newspapers and magazines. Discontent spreads until the political party responsible for the new tariff is overthrown. Thereupon, the result is exultantly acclaimed not as a mere rejection of a given law but as a popular repudiation of the whole fundamental protective policy.

This was the line of argument in 1890-1892. The McKinley tariff was therefore repealed, and the Gorman-Wilson tariff substituted for it. Protection was described as "dead." Yet, within a few months of the enactment of the Gorman-Wilson law, the political party responsible for it was overwhelmed by the most fearful defeat in the State and Congressional elections of 1894 that had ever been inflicted in a year of peace in the whole history of American politics. The American people had been persuaded that the McKinley law in many details was wrong, but they had not been converted to free trade. They were still protectionists by a vast majority. They still believed that our fiscal legislation should be so arranged as to give preference to American industry, American wages, and American business. When the Democratic leaders mistook discontent with details of one tariff law for a definite rejection of the protectionist idea by the American people, these leaders were promptly disillusionized by being turned out of power, as will inevitably be the result again if Mr. Wilson and his associates misread the similar meaning of the late election.

The Underwood bill relative to wool and woolens, twice passed by the House, twice amended by the Senate, and twice vetoed by the President, is confessedly a radical measure. It provides for rates of duty on wool manufactures lower by one-fourth than the rates that proved ineffective and disastrous in the Gorman-Wilson law of 1894. Raw wool, the indispensable material, is kept dutiable at 20 per cent, instead of being placed, as it was in 1894,

on the free list. The proposed measure as described by Chairman Underwood himself in his report "provides a much lower margin, and hence a much more competitive rate, for manufactures of wool than has been passed by the House of Representatives or enacted in any other Democratic measure since the tariff acts of 1846 and 1857."

Now the American people in the Presidential election just held did not declare in favor of any such radical reduction, any such tariff-for-revenue-only, as this. If they had wished to declare for such a policy a great majority of them instead of a minority would have voted for Mr. Wilson as President. The Underwood bill and its basic principles were not farther from the ideas of the followers of Mr. Taft than of the followers of Mr. Roosevelt. The Underwood bill ignores protection. Both the Taft people and the Roosevelt people regard protection as wise and indispensable. The line of cleavage on this vital issue leaves Mr. Wilson and his adherents on the one side, and Mr. Taft, Colonel Roosevelt and their adherents on the other, and by this practical test the Underwood bill is heavily outvoted and condemned.

This plebiscitum of November 5 ought to result in a revision of the Underwood proposal, and a marked advance in its rates of duty. Tariff-for-revenue-only is approved only by a minority of all the people of America. It is quite possible that Chairman Underwood, deservedly regarded as a fair and open-minded public man, was influenced by this when he announced a few days after the election that a series of hearings on the projected bills would be held in Washington this winter before the new Congress is called to grapple with the actual work of tariff reform. Considerations of justice as well as of expediency are now powerfully counselling a moderate course. President-elect Wilson has pledged himself to a cautious method of procedure. The high prosperity of the country may be easily disturbed, and if another Democratic administration brings closed factories, idleness, and disaster in its train, no explanation will be accepted by the American people, and that Democratic administration is liable to prove the last for another quarter of a century.

PRICES OF YARNS AND CLOTHS.

A RECORD OF MARKET QUOTATIONS ON CERTAIN STANDARD COMMODITIES.

BEGINNING in this issue of the Bulletin there is presented a record of Boston market quotations on certain typical yarns and cloths for several recent years. This record will be continued and extended in the Bulletin and eventually presented in the form of a graphic chart, similar to the chart in this number, showing the fluctuations in wool prices.

PRICES OF CERTAIN STANDARD WORSTED YARNS.

	2/24-3.	2/32-4.	2/40-X.	2/50-XX.
Jan. 1, 1905	\$0.79	\$0.90	\$1.04	\$1.24
April 1, 1905 .....	.77	.86	1.04	1.24
July 1, 1905 .....	.81	.90	1.09	1.31
Oct. 1, 1905 .....	.84	.94	1.18	1.38
Jan. 1, 1906 .....	.84	.97	1.20	1.37
April 1, 1906 .....	.84	.97	1.20	1.37
July 1, 1906 .....	.84	.97	1.20	1.37
Oct. 1, 1906 .....	.83	.97	1.20	1.34
Jan. 1, 1907 .....	.83	.96	1.18	1.34
April 1, 1907 .....	.85	.99	1.20	1.35
July 1, 1907 .....	.84	.99	1.20	1.35
Oct. 1, 1907 .....	.83	.95	1.18	1.33
Jan. 1, 1908 .....	.83	.95	1.18	1.33
April 1, 1908 .....	.74	.84	1.08	1.28
July 1, 1908 .....	.72	.82	1.00	1.24
Oct. 1, 1908 .....	.72	.82	1.00	1.24
Jan. 1, 1909 .....	.78	.90	1.15	1.37
April 1, 1909 .....	.82	.96	1.18	1.38
July 1, 1909 .....	.82	.96	1.22	1.40
Oct. 1, 1909 .....	.96	1.06	1.32	1.50
Jan. 1, 1910 .....	.94	1.08	1.32	1.50
April 1, 1910 .....	.88	1.02	1.25	1.40
July 1, 1910 .....	.83	.95	1.10	1.30
Oct. 1, 1910 .....	.78	.93	1.05	1.30
Jan. 1, 1911 .....	.80	.92	1.07½	1.30
April 1, 1911 .....	.75	.86	1.05	1.22
July 1, 1911 .....	.73	.86	1.00	1.18
Oct. 1, 1911 .....	.73	.86	1.00	1.18
Jan. 1, 1912 .....	.74	.86	1.00	1.17
April 1, 1912 .....	.76	.90	1.05	1.22
July 1, 1912 .....	.78	.90	1.08	1.25
Oct. 1, 1912 .....	.84	.98	1.15	1.32
Jan. 1, 1913 .....	.84	.98	1.15	1.32

NOTE.

3 = 1/4 Blood Stock.

4 = 3/8 " "

X = 1/2 " "

XX = Fine Medium Stock.

PRICES OF CERTAIN STANDARD WORSTED FABRICS, 1900-1913.

	3192. Fulton Serge.	666. Wash- ington Serge.	200. Wash- ington Clay.	205. Wash- ington Clay.		816-78. Unfin- ished Worsted.	818-50. Serge.
Spring 1900 . . .	\$1.02	\$1.25	\$1.22	\$1.35	Fall 1900 . . .		\$2.10
1901 . . .	1.07	1.30	1.37	1.50	1901 . . .	\$1.22	1.57
1902 . . .	.97	1.12	1.15	1.25	1902 . . .	1.20	1.50
1903 . . .	1.05	1.17	1.22	1.35	1903 . . .	1.30	1.65
1904 . . .	1.00	1.20	1.22	1.37	1904 . . .	1.20	1.57
1905 . . .	1.02	1.20	1.22	1.37	1905 . . .	1.37	1.65
1906 . . .	1.25	1.47	1.55	1.72	1906 . . .	1.62	1.95
1907 . . .	1.30	1.57	1.62	1.80	1907 . . .	1.57	1.95
1908 . . .	1.30	1.57	1.55	1.77	1908 . . .	1.52	1.95
1909 . . .	1.15	1.40	1.42	1.57	1909 . . .	1.50	1.90
1910 . . .	1.50	1.72	1.80	1.97	1910 . . .	1.67	2.05
1911 . . .	1.30	1.55	1.55	1.80	1911 . . .		1.85
1912 . . .	1.15	1.40	1.40	1.62	1912 . . .	1.52	1.85
1913 . . .	1.30	1.57	1.55	1.75			

WOOLS FOR THE WOOLEN TRADE.

RELATIVE DEMANDS OF THE COMBING AND CARDING
INDUSTRY IN GREAT BRITAIN.

MANY members of the trade do not differentiate as they should between raw materials suitable for woolen and worsted manufacture, and overlook the important essentials in wools suitable for these two branches of the textile industry, says an article in the "Wool Record" of Bradford, England, of November 7, 1912. One gets so used to thinking that the price of combed tops and worsted yarns determines the course of values that almost unconsciously the requirements of the woolen, hosiery and carpet trades are overlooked.

It should ever be remembered that the woolen industry is a long way the older branch of the trade, and it is doubtful which section consumes the largest quantity of raw material. The worsted industry of Great Britain covers a very much smaller field than the woolen and hosiery trades, but during recent years there has been such a remarkable development that immense quantities of yarns spun from tops are to-day being consumed by woolen and hosiery manufacturers which in the old days seldom found their way into the class of goods in the making of which carded yarns were consumed. We make bold to say that no greater fillip has been given to the worsted branch of the industry during recent years than the large quantities of yarns which

to-day are being consumed in conjunction with carded materials. How many firms do we find to-day using a worsted warp in combination with a woolen weft? How many mills are there where single worsted yarns are being used by twisting them with a woolen and cotton thread for the production of an endless variety of rainproofs, and fabrics suitable for both men's and women's wear? The fact is, the whole of the textile industry has wonderfully changed during the past ten years, and has developed upon lines necessitating a larger consumption of raw wool. This is an aspect of the trade which we are confident has never received the attention it deserves, and which helps to explain why wool values are now so high notwithstanding that Australia is turning out over two million bales annually compared with under one million bales in 1903-04.

WOOLEN TRADE REQUIREMENTS.

Looking at the wools suitable for the woolen trade, it is necessary to make the preliminary remark that the fleeces of sheep can be divided into two principal classes, the wools suitable for the woolen, and the other fitted for the worsted industries. It is remarkable how one section seems to dovetail into the other, and the parts of the shorn fleece which are not fitted for combing and spinning into worsted yarns can be taken and utilized by woolen and hosiery manufacturers, and turned by them to profitable account. Nature and man together seem to have evolved an animal from which, do as they will, breeders cannot produce a uniform quality, length, and character of wool throughout the entire fleece. It is quite true that the more uniformity one meets with in a full fleece of wool, the more valuable it is, but we do not think that ever sheep will be made to suit these ideal requirements. The trade has therefore to take fleeces as they stand, and make the best out of them. Here comes the value of good classing and careful sorting. The best parts of the fleece naturally go for combing purposes, the wool being afterwards spun on the cap or fly principle. The woolen manufacturer then comes in and uses the shorter and worse grown portions of the fleece. Let no reader misinterpret or read into these remarks what is not intended. We recognize that the woolen trade consumes some large quantities of the very best combing wool grown in Australia, South Africa, and elsewhere, usually the highest prices being paid by woolen or hosiery manufacturers. There are firms

making superfine fabrics who must have the very finest and best wools grown, and it is remarkable that when woolen manufacturers are in the field and wanting the raw material, they can usually afford to knock out a topmaker or worsted spinner. The statement that such and such a person is buying the first lots of a clip for manufacturers engaged in producing nothing else but woolen fabrics, is a familiar one in Coleman Street Wool Exchange, and when a worsted spinner who also wants similar material joins in the fray, very tall figures are paid. At the same time, there is a big weight of raw wool which is too short and wasty to be combed into tops, but which the woolen industry uses freely.

It can be taken for granted that the bulk of the wool long enough for combing purposes finds its way into the worsted branch of the textile industry. When we come to ordinary combing, pieces, bellies, and locks, we find large quantities of these descriptions are going into the hands of the woolen people. The nature of their trade enables them to utilize these special descriptions, and work them up to better advantage than the majority of topmakers. We are well aware that to-day large quantities of bellies and pieces are used for top-making purposes, but when all is said and done, it is the shabbier portions of the shorn fleece which can be best used to advantage by those turning out woolen fabrics. The French comb enables topmakers to use shorter grown wools than when the raw material is combed upon a Noble or Holden machine, and as we have previously said, the woolen trade of Great Britain can always rely upon a useable range of the descriptions we have named. The remarks we have made apply just as well to the use of crossbred wools as merino, and considerable amounts of medium and fine crossbreds are being consumed in the production of cheviot tweeds and fabrics where a rough handling article is wanted. Nobody would ever think of combing heavy, wasty second pieces and locks; these do very well indeed for mulespun yarns. Hence we say that the woolen trade is a very important adjunct of the wool industry, and there is no doubt that but for it some classes of wool would have to go begging for a customer.

FEATURES OF LAMBS' WOOL.

Lambs' wool is a very prime favorite with woolen and hosiery manufacturers, and always will be. We are afraid that during

the next twelve months this class of raw material will be scarce, and our many readers using it need to be prepared to pay more money than they have given during the past year. The lambing in Australia has not been an entire failure, but a good few millions of young sheep have been lost from whose backs not a lock of wool has been shorn, and we fully expect that there will be a squeeze for this sort before another Australian clip is available. It seems to possess properties which are not found in any other class of raw material. Its "springy" nature seems to especially fit it for blending with other classes largely used in woolen mills. Also for blending with mungo and cotton they do admirably, their vitality being such that they rise to the surface of the cloth, and to some extent hide the inferior material which has been used with them. We fully expect to see lambs' wool quite as high in price this year as ever it has been, due to its scarcity and also to the growing demand. It is remarkable that hosiery manufacturers have this last few years gone in more than ever for buying lambs' wool, but they must have them free from burrs, and as a rule the highest priced West Victorian lambs which frequently sell up to 4s. per pound in the scoured state usually go for the production of lines of underwear where money is no object. Huddersfield manufacturers also buy these superior West Victoria lambs, which are used for very soft handling goods. This year the Australian clip should provide a superabundance of wool well fitted for woolen manufacturing and hosiery purposes, and we hope that in order to facilitate consumption, trade will continue to be good.

CLIP CHANGING CHARACTER.

No tendency in sheep breeding is more marked than the steady decline of the merino sheep in favor of the crossbreds — a process going on in all the wool-raising countries of the world. The significance of this is well set forth in the following article from the "National Wool Grower" for December:

Within the last two years the manufacturers who use fine merino wool have begun to appreciate that this commodity is gradually disappearing from the earth. Only a few years back fine wool was extensively produced in all the great wool producing nations. But the fact that wool alone is not as profitable

as wool and mutton has rapidly brought about important changes in the character of the world's wool, until at this time fine merino wool bids fair to soon be classed as a luxury.

Originally, the wools of Argentine were largely merino. To-day, 80 per cent of that clip is classed as crossbred, and rather a low crossbred at that. Twenty years ago the clip of New Zealand was nearly all fine merino. To-day, more than 80 per cent of it is crossbred. Australia has naturally been the stronghold of the merino sheep, and of the best merino sheep in the world, and it is naturally expected that in her pastures the merino will make its final stand. However, the immutable law of profit which has so changed the sheep industry of other countries is now making itself felt in the character of the Australian clip. Only a few years ago Australia produced an insignificant volume of crossbred wool, but it is estimated that 28 per cent of the clip of 1911 was crossbred. The steady trend toward crossbreds in Australia is seen from the fact that 28 per cent of the clip of 1911 was crossbred, 26 per cent of the 1910 clip, 24 per cent of the 1909 clip, and 22 per cent of the 1908 clip. Thus in three years the proportion of crossbred wool has increased 6 per cent.

From Australian reports one is led to believe that the increase in crossbred in the future will be decidedly more rapid than in the past. It is reported that at this season's ram sales the fine wool rams did not find as ready a market as has been the case in the past, and that coarse wools were in great demand. Many stations formerly using merinos are this year using coarse wools. In fact, this tendency to abandon the merino has led Australia's most prominent wool paper to state, "furthermore, it would be a national calamity if all the merino studs disappeared. They are an absolute necessity to the sheep and wool industry and therefore to Australia, for when fine wool becomes so scarce that it will be worth big money, the farmers will want to breed towards the merino, and there will be all too few fine woollen sheep available for the purpose."

It is not alone in foreign countries that the merino is disappearing, for right here at home there has been a tremendous change toward the crossbred. Breeders of fine wooled rams experienced great difficulty in making sales last year, and the reports for the present season have been but little better. The demand has been for the coarse and middle wooled breeds, and so insistent has been the demand for this character of sheep that we feel that the supply available did not fully satisfy it. This use of the crossbred on the merino ewe necessarily means that the purebred merino on our Western ranges is to decrease in numbers very rapidly. In fact, there is now in the West a demand for merino ewes that cannot be satisfied, and if it has not been met this year the prospects are that it never can be met in the future, and it would seem that the question of a supply of

appropriate ewes for range uses is a matter that should receive the serious consideration of the range breeders. No doubt the merino can be displaced by the halfblood with profit to most of the sheepmen in the range country, but the question appears as to where the halfblood is to come from after the merino foundation has been destroyed.

The tendency toward the crossbred all over the world is merely a move in obedience to the law of supply and demand. The extreme perfection that has been brought about in the storage and transportation of mutton has made it possible for the sheep to be raised in one end of the world and consumed, while still in a good state of preservation, in the other end of the world. The world's meat-eating population is gradually increasing, while the world's meat-producing area is rapidly decreasing. Therefore, the increased demand for meat as time goes on is going to make it necessary that the flockmaster of the future shall conduct his operations with an eye toward the production of wool and mutton if possible from the same animal. The result of this, naturally, will be the disappearance of the immense volume of fine merino wool to which the manufacturers have had access in the past, with the attendant result that fine wool in the not distant future will become so scarce that the price at which it will sell in the market will be almost, if not quite, double the price at which it is now sold.

"HANDLE" IN WOOL FABRICS.

THAT VALUABLE QUALITY IN CLOTH AND HOW BEST TO SECURE IT.

TOUCH — or the feeling the hand receives when passed over the surface of a cloth — is the great criterion for discerning quality in fabrics made from wool, and this appreciation, mysterious as it seems to the outsider, is so reliable to the experienced that cloths may be valued blindfold. It is useless to attempt any explanation of how it is done, says an interesting article in the "Yorkshire Observer" of September 26, 1912. The faculty of judging by feel comes only from long practice, and is a curious illustration of the way in which the sense of touch can be cultivated. Next to color there is no doubt that a soft, agreeable feeling to the hand is the most important point in the manufacture of wool fabrics — more particularly in the higher grades, where a hard board-like feel would at once condemn the cloth no matter how perfect otherwise. To this end a soft elastic structure must be aimed at, the production of which

depends upon the proper selection of material used in construction, proper scouring, dyeing, carding, and spinning, as well as the right choice of warp and wefting texture and good finishing.

The raw material is, of course, the great factor, as soft cloths cannot be produced from wool that is naturally hard and harsh, no matter how much work is put into it by the finisher. Wool in the growing state is largely influenced by the nature of the pasturage, the condition of the soil, influence of temperature, etc., all of which have an important bearing upon the character of the fiber produced. During a prolonged drought when the food supply runs short, that portion of the wool fiber which has grown during the shortage will be found thinner and weaker than the rest of the fleece, so that a lock of wool may show a weakness of fiber in the center of the staple corresponding in extent to the length of the drought. Some wool fibers show up their true nature only during the process of manufacture, when it may happen that an apparently good and soft wool will give unfavorable results, the fiber itself seeming to assume a different character after manipulation from that which the raw material originally had.

EFFECTS OF BAD SCOURING.

Following sorting, the next process the wool undergoes is that of scouring, which is itself a factor in determining to a great extent the handle of the finished cloth. It should be carried out in such a manner that the wool, after drying, presents a nice, "lofty" feel, in addition to being perfectly cleansed from all its impurities. When neglected or improperly done scouring can ruin good soft wool, making it harsh and hard, which is usually the result of using too strong a lye. Too high a temperature in the scouring liquor will also injure the fiber quite as much as the use of strong alkalies, and hot liquors will also cause a considerable waste by the fibers felting. Should a batch of wool be insufficiently scoured, it will present a stiff, harsh feel to the hand, due to some of the wool yolk still adhering to it. This condition will be rendered still worse as the wool passes through the subsequent processes. An inferior scour can never be corrected satisfactorily afterwards, either by a second washing or by scouring the wool in the fabric state, so that this process should be always left in the hands of a competent man. Imperfectly scoured wool will readily develop a hard feel, par-

ticularly so when subjected to a moist heat, and this can be accounted for by the clogging of the fiber by the decomposed products of the yolk which have not been eliminated.

Clean wool free from the natural yolk^s is absolutely essential if the material is to show up its best, and for this reason a wool carbonized in the yolk can never be got so clean and soft as if scoured first, as the acid which is used combines with constituents of the yolk to form a sticky coating on the fiber. In former times the handle of a cloth frequently suffered by the treatment it went through in the dye-house, as tin and alum salts, which were largely used at one time, gave a harsh feeling to the material. To-day these are out-of-date, the chief and nearly the only mordant used being bichromate of potash, which has no effect whatever upon wool beyond slightly lessening its strength. Excessive boiling may to some extent rob the fabric of some of its softness, and in this respect fabrics treated with the alizarine dyes, which must be applied at the actual boil, do not give the same handle which those dyed with indigo possess, the latter of course being dyed very much under boiling point. The use of fuller's earth for washing off after dyeing helps to keep the goods soft, as it works out the loose superfluous dye, which is entangled in the wool. This latter, if not removed, gives the cloth a slightly sticky feel.

TWIST AND WEAVE.

Another feature influencing the condition and feel of the finished cloth is the amount of draft and twist per inch given to the yarn in the spinning process, the stiffness of the fabric increasing with the hardness of the yarn — that is, its twist. It does not, however, follow that a very loose twisted yarn of a heavy count will make a soft cloth, but just the reverse. Material woven from a heavy count of yarn, loosely twisted, will, if subjected to a heavy milling, become rather hard — harder in fact than if made from a finer count of yarn containing more turns of twist per inch. The heavier the count and less the twist, the easier the process of felting, and this latter item always tends to make the cloth board-like and hard. It is common knowledge that every system or design has its own peculiarities in the matter of modifying the handle. As an example, a cloth interlaced with a plain weave or a granite will always present a somewhat harder and firmer feel than one interlaced

with a twill or satin weave. The general rule amounts to this — the tighter the construction (that is, the more interlacings of warp and weft in a given number of warp and filling threads) the harder and more compact the fabric will be, and, of course, more boardy to the touch. Raising, or developing a pile or nap, softens the handle of an otherwise hard cloth, and this is frequently done to the backs of such cloths to make them soft and feel full and clothly in the hand.

The scouring and fulling are both responsible for modifying the handle of the cloth more or less, and the great feature for both is the use of soft water. Using water rich in salts of lime and magnesia works other mischief than wasting soap; the salts combine with the fatty acid in the soap to form what is termed a lime soap — a white, sticky body with the consistency of bird-lime, which coats the wool fiber, and is most difficult to remove. Rain water, or that from condensed steam, forms the best medium for scouring, while in the absence of both, a naturally hard water should be softened by the addition of alkali. Goods intended for milling are made much slacker in the loom, to allow the fibers to close up as the cloth shrinks, and the milling must have plenty of lubricant in the shape of soap solution or the cloth will become hot and dry, which always results in the wool turning hard and brittle. Another point is never to allow wet cloth to lie about long after scouring, raising, or fulling, as woolens become hard if left to lie in a wet or moist condition for long, particularly with hard water.

WHAT FINISHING CAN DO.

In the case of worsted cloths, the finish can only enhance the clearness and make of the fabric. Softness can be imparted by careful crabbing and scouring, but these processes cannot cover up defects or alter the make in any way, as that depends upon the weaving and design. In the case of woolens, finishing has a wider scope, particularly where the make of the cloth is covered by a long or short nap, and very often in this latter case structural defects can be covered up. No amount of raising, however, can alter the character of the wool, and it is as impossible to produce a fine short nap on a fabric made from long wool as it is to obtain a full lofty nap from soft and short-fibered material. Steam lustring will do much toward mitigating the sharp feeling possessed by cloths made from coarse wools, but at the same time

that smoothness of handle is imparted, the material will feel thinner and more papery, as the fibers are pressed together in a consolidated mass. A certain percentage of moisture in the finished article is absolutely necessary for the sake of softness, and it is perfectly legitimate to add this during the finishing processes to replace that which the wool fibers hold naturally.

Pressing is an operation which improves the handle in a marked degree, and the old type of pressing with papers between each fold is still the best system, even if the method is slow and cumbersome. Roller pressing machines impart a glazed luster to the cloth, but not of the same nature as that got by pressing between papers. The reasons for the difference are two-fold. In the first place, when the cloth is pressed between papers the moisture cannot get away, and so penetrates into the heart of the fabric. Secondly, in a rotary press the small area of cloth which is under pressure, together with the short time the pressure is exerted, means that necessarily the pressure put on must be enormous to produce any result. Moreover, the heat from the roller and the bed drive out the moisture from the fabric and leave it harsh. Cold pressing, or "flatting," which is the last process the cloth undergoes, improves the handle considerably, and this is readily seen if comparison is made between two pieces, one of which has undergone it and the other has not.

BRITISH WOOLEN AND WORSTED INDUSTRY.

UNITED STATES CONSUL FRANKLIN D. HALE, at Huddersfield, England, makes the following interesting statements in the "Daily Consular and Trade Report" of December 20:

British woolen and worsted tissues exported during the six months ended October 31, 1912, were valued: Woolen, \$36,231,325; worsted, \$16,459,050. In comparison with the corresponding six months of 1911 these figures show an increase of \$4,004,585 in woolen-tissue exports and of \$294,565 in the worsted shipments. The export trade with Canada, China, Netherlands, France, Brazil, Japan, and Mexico advanced, but sales to Turkey, Egypt, East Indies, Australia, New Zealand, Chile, and Germany declined. During the year ended October 31, 1912, imports of sheep's and lambs' wool into the United Kingdom amounted to 819,856,538 pounds, of which 346,065,616 pounds were reexported, 82,543,970 pounds of the reexported wool being sent to the United States.

The revival of fashion in fancy vestings is making an unusual demand upon the manufacturers of that class of goods in the Huddersfield district. In Shepley, Skelmanthorpe, Denby Dale, Kirkheaton, Shelley, Kirkburton, Almondbury, and Dalton, outlying districts in the borough of Huddersfield, manufacturers are well employed and in some mills overtime is being worked. This fashion apparently arises from the desire for something lighter and more ornate than the knitted effects which have been noticeable in recent years. Formerly hand-loom weaving was extensively employed throughout this district in the manufacture of this class of goods, but in recent years the hand-loom has been largely superseded by power-driven machines. One company which formerly employed 300 hand-loom weavers of vesting cloth to-day employ almost none. The cloths now being made are generally in the lighter colors and of more artistic designs than the heavier styles common a few years ago.

THE RAG TRADE.

No doubt is now entertained by manufacturers in the heavy-woolen district, which includes Dewsbury, Batley, and near-by towns, that the output for 1912 will be the largest known. A satisfactory business is being done in all branches of the trade, and to execute orders within a reasonable period is a problem. Correspondingly large profits can hardly be hoped for, however, as the raw material is high and constantly increasing in price. The abundance of orders received and the high value of new wool necessitate the recovery of all waste so far as possible.

Immense quantities of woolen rags are annually imported from the United States and other countries into this center of the heavy woolen industry, where there are already in operation nearly 900 rag-grinding machines. The annual importation of rags into all England is about 100,000,000 pounds, of which the United States contributes a large proportion. Treated and cleaned as these rags now are, the former prejudice against cloth made from such material is fast disappearing. New wool direct from the sheep can be no more clean and sanitary.

The call for less expensive raw material to be used in the manufacture of cloths has had a natural tendency to strengthen the market price for rags. Recent consignments from the continent and other countries have not been equal to the demand. Imports from the United States have fallen off, receipts of American rags for the first nine months of 1912 being 10,375 tons, against 15,047 tons for the corresponding period in 1911. A similar condition exists as to most of the other countries from which importations are usual, the total British imports of unpulled woolen rags for the first nine months of 1912 being 36,508 tons as against 44,333 tons in the first three-quarters of 1911.

QUARTERLY REPORT OF THE BOSTON WOOL MARKET
FOR JULY, AUGUST, AND SEPTEMBER, 1912.

DOMESTIC WOOLS. (GEORGE W. BENEDICT.)

	1912.			1911.
	July.	August.	September.	September.
OHIO, PENNSYLVANIA, AND WEST VIRGINIA.				
(WASHED.)				
XX and above	31 @ 32	31 @ 32	31 @ 32	28 @ 28½
X	29 @ 30	29 @ 30	29 @ 30	26 @ 27
1/2 Blood	35 @ 36	36 @ 37	37 @ 38	31 @ 32
"	35 @ 36	36 @ 37	37 @ 38	30 @ 31
"	35 @ 36	36 @ 37	37 @ 38	29 @ 30
Fine Delaine	33 @ 34	34 @ 35	34 @ 35	29½ @ 30
(UNWASHED.)				
Fine	23 @ 24	23 @ 24	23 @ 24	20 @ 21
1/2 Blood	28 @ 29	29 @ 30	29 @ 30	25 @ 26
"	28 @ 29	29 @ 30	30 @ 31	24½ @ 25½
"	28 @ 29	29 @ 30	30 @ 31	24 @ 25
Fine Delaine	27 @ 28	27 @ 28	28 @ 29	24 @ 25
MICHIGAN, WISCONSIN, NEW YORK, ETC.				
(WASHED.)				
Fine	34 @ 35	35 @ 36	36 @ 37	29 @ 30
1/2 Blood	34 @ 35	35 @ 36	36 @ 37	29 @ 30
"	34 @ 35	35 @ 36	36 @ 37	28 @ 29
Fine Delaine	32 @ 33	33 @ 34	33 @ 34	28 @ 29
(UNWASHED.)				
Fine	21 @ 22	21 @ 22	22 @ 23	19 @ 20
1/2 Blood	27 @ 28	28 @ 29	28 @ 29	24½ @ 25
"	27 @ 28	28 @ 29	29 @ 30	24 @ 24½
"	27 @ 28	28 @ 29	29 @ 30	23 @ 24
Fine Delaine	25 @ 26	25 @ 26	26 @ 27	22 @ 23
KENTUCKY AND INDIANA.				
(UNWASHED.)				
1/2 Blood	29 @ 30	29 @ 30	31 @ 32	24 @ 25
"	29 @ 30	29 @ 30	31 @ 32	23 @ 24
Braid	26 @ 27	26 @ 27	26 @ 27	22 @ 22½
MISSOURI, IOWA, AND ILLINOIS.				
(UNWASHED.)				
1/2 Blood	27 @ 28	28 @ 29	29 @ 30	23½ @ 24
"	27 @ 28	28 @ 29	29 @ 30	23 @ 23½
Braid	25 @ 26	25 @ 26	26 @ 27	21½ @ 22
TEXAS.				
(SCOURD BASIS.)				
12 months, fine, and fine medium . .	58 @ 60	60 @ 62	60 @ 62	52 @ 53
6 to 8 months, fine	51 @ 53	53 @ 55	53 @ 55	45 @ 47
12 months, medium	51 @ 53	53 @ 55	53 @ 55	45 @ 46
6 to 8 months, medium	45 @ 48	47 @ 50	47 @ 50	39 @ 41
Fall, fine and fine medium	45 @ 47	48 @ 49	48 @ 50	39 @ 42
" medium	42 @ 43	43 @ 45	43 @ 45	37 @ 39
CALIFORNIA.				
(SCOURD BASIS.)				
Free, 12 months	52 @ 54	52 @ 54	53 @ 55	48 @ 50
" 6 to 8 months	46 @ 48	47 @ 48	47 @ 48	43 @ 44
Fall, free	43 @ 45	45 @ 46	45 @ 46	37 @ 38
" defective	38 @ 40	38 @ 40	39 @ 41	31 @ 33
TERRITORY WOOL: Montana, Wyoming, Utah, Idaho, Oregon, etc.				
(SCOURD BASIS.)				
Staple, fine and fine medium	62 @ 64	67 @ 68	67 @ 68	58 @ 60
" medium	58 @ 59	62 @ 64	62 @ 64	50 @ 53
Clothing, fine and fine medium . . .	55 @ 57	60 @ 62	60 @ 62	50 @ 53
" medium	53 @ 55	57 @ 58	57 @ 58	42 @ 45
NEW MEXICO. (Spring.)				
(SCOURD BASIS.)				
No. 1	53 @ 55	58 @ 60	58 @ 60	47 @ 48
No. 2	49 @ 51	52 @ 54	52 @ 54	42 @ 43
No. 3	43 @ 45	45 @ 47	45 @ 47	33 @ 36
No. 4	40 @ 42	43 @ 45	43 @ 45	31 @ 33
NEW MEXICO. (Fall.)				
(SCOURD BASIS.)				
No. 1				
No. 2				
No. 3				
No. 4				
GEORGIA AND SOUTHERN.				
Unwashed	23 @ 24	27 @ 29	27 @ 29	21 @ 22

DOMESTIC WOOL.

Boston, September 30, 1912.

The market during the present quarter (July, August and September) has been active and with an advancing tendency.

The light weight season has been very satisfactory for manufacturers and all available machinery is moving to supply the heavy demand required for goods to replenish much depleted stocks. Medium grades have been wanted especially, but a sufficient number of mills have been busy on the better class of goods to insure a fair business on the finer grades also.

It is estimated that fully sixty per cent of the clip has been sold since arrival and as the consumption of wool is probably larger than ever before, the prospects are favorable for a very light stock going forward into the new year.

Notwithstanding the probability of Democratic success at the polls this fall, a normal heavy weight business is expected, which means large wool requirements before another clip.

GEORGE W. BENEDICT.

PULLED WOOLS.* (*Scoured basis.*) (W. A. BLANCHARD.)

	1912.			1911.
	July.	August.	September.	September.
Extra, and Fine A	57 @ 63	58 @ 63	60 @ 65	48 @ 55
A Super	54 @ 56	54 @ 57	55 @ 58	46 @ 48
B Super	50 @ 53	50 @ 54	48 @ 52	42 @ 45
C Super	38 @ 42	40 @ 43	40 @ 43	33 @ 36
Fine Combing	56 @ 60	57 @ 60	57 @ 60	48 @ 52
Medium Combing	52 @ 54	52 @ 55	52 @ 55	44 @ 46
Low Combing	47 @ 50	47 @ 50	47 @ 50	39 @ 42
California, Extra	56 @ 61	57 @ 62	57 @ 62	45 @ 52

PULLED WOOLS.

Continued activity by the woolen mills has made a steady demand for pulled wools throughout the quarter and prices have gradually hardened. An exception may be noted in the case of B supers, which fell off slightly in September; but this was brought about by unwarranted advances by the pullers and the feeling on the part of buyers that medium and coarse wools were disproportionately high in comparison with finer grades. A wider demand for A supers, coupled with a short supply, has restored this grade to its normal place in the price-list.

Few, if any, wools of combing length are pulled at this season and the quotations given are based on the values of corresponding grades of fleece. Stocks of pulled wools were closely sold up to production and the market has held strong regardless of political uncertainties.

W. A. BLANCHARD.

FOREIGN WOOLS. (MAUGER & AVERY.)

	1912.			1911.
	July.	August.	September.	September.
Australian Combing:				
Choice	41 @ 44	41 @ 44	41 @ 44	40 @ 41
Good	40 @ 41	40 @ 41	40 @ 41	37 @ 38
Average	36 @ 38	36 @ 38	36 @ 38	32 @ 35
Australian Clothing:				
Choice	42 @ 44	42 @ 44	42 @ 44	40 @ 42
Good	40 @ 41	40 @ 41	40 @ 41	36 @ 39
Average	38 @ 39	38 @ 39	38 @ 39	34 @ 36
Sydney and Queensland:				
Good Clothing	42 @ 45	42 @ 45	42 @ 45	38 @ 40
Good Combing	40 @ 43	40 @ 43	40 @ 43	36 @ 39
Australian Crossbred:				
Choice	40 @ 43	40 @ 43	40 @ 43	38 @ 40
Average	35 @ 38	35 @ 38	35 @ 38	33 @ 36
Australian Lambs:				
Choice	42 @ 45	42 @ 45	42 @ 45	42 @ 45
Good	39 @ 40	39 @ 40	39 @ 40	39 @ 40
Good Defective	37 @ 38	37 @ 38	37 @ 38	35 @ 36
Cape of Good Hope:				
Choice	34 @ 36	34 @ 36	34 @ 36	34 @ 35
Average	30 @ 33	30 @ 33	30 @ 33	32 @ 33
Montevideo:				
Choice	35 @ 37	35 @ 37	35 @ 37	34 @ 35
Average	32 @ 34	32 @ 34	32 @ 34	32 @ 33
Crossbred, Choice	35 @ 38	35 @ 38	35 @ 38	35 @ 37
English Wools:				
Sussex Fleece	41 @ 42	41 @ 42	41 @ 42	40 @ 41
Shropshire Hogs	40 @ 41	40 @ 41	40 @ 41	38 @ 39
Yorkshire Hogs	36 @ 38	36 @ 38	36 @ 38	35 @ 36
Irish Selected Fleece	33 @ 39	33 @ 39	33 @ 39	35 @ 36
Carpet Wools:				
Scotch Highland, White	23 @ 25	23 @ 25	23 @ 25	22 @ 24
East India, 1st White Joria	31 @ 33	31 @ 33	31 @ 33	29 @ 31
East India, White Kandahar	27 @ 28	27 @ 28	27 @ 28	27 @ 28
Donskoi, Washed, White	35 @ 36	35 @ 36	35 @ 36	33 @ 34
Aleppo, White	35 @ 36	35 @ 36	35 @ 36	32 @ 33
China Ball, White	25 @ 27	25 @ 27	25 @ 28	22 @ 24
“ “ No. 1, Open	23 @ 25	23 @ 25	24 @ 25	20 @ 21
“ “ No. 2, Open	18 @ 19	18 @ 19	18 @ 19	18 @ 15

FOREIGN WOOLS.

The demand for foreign wools during the third quarter of the year has fallen off to some extent on crossbred wools, probably owing to the reduced supplies, but manufacturers have been pretty free buyers in London.

This market has had more inquiry for fine clothing wool. English wools have been in better request, but the volume of business has not been very large, because values abroad made the cost fully up to the value of domestic wools.

Carpet wools are in moderate supply and the consumption appears to be large.

China wools have advanced in price and the better styles of washed wools are now at such a high point that they would hardly be used except where orders have been taken and goods required a percentage of such wools.

As we draw nearer the time for the election, there is a general cessation of the apparent excitement which prevailed during the summer months.

MAUGER & AVERY.

OCTOBER 3, 1912.

IMPORTS OF WOOL AND MANUFACTURES OF WOOL.

Entered for Consumption, Years ending June 30, 1911 and 1912. Quantities, Values, Rates of Duty, and Accruing Duties.

Compiled from Reports of Commerce and Navigation, Bureau of Statistics, Department of Commerce and Labor.

ARTICLES.	Rates of duty.	1911.			1912.		
		Quantities.	Foreign values.	Duties.	Quantities.	Foreign values.	Duties.
				Dollars.		Dollars.	Dollars.
							Pr. ct.
							Ad valorem
							rate of duty.
							Value per unit of quantity.
Wools, hair of the camel, goat, alpaca, or other like animals:							
Class 1.—Merino, mestizo, metz, or mets wools, or other wools of merino blood, immediate or remote, down clothing wools, etc., and all wools not hereinafter included in classes two and three —							
Unwashed wool —							
On the skin (pounds)	10 cents per pound,	2,612,238.25			700,192.96		
Not on the skin (pounds)	11 cents per pound,	55,621,116.08	602,145.48	261,223.83	124,642.00	70,019.21	178 56.18
Washed wool —			13,283,075.00	6,118,322.76	68,645,198.93	15,185,798.75	221 49.72
On the skin (pounds)	21 cents per pound,	47.00	15.00	9.87	280.00	51.00	182 115.29
Not on the skin (pounds)	22 cents per pound,	102.00	23.00	22.44	88.00	19.36	307 71.70
Scoured wool (pounds)	33 cents per pound,	436.00	206.00	143.88	126.00	41.50	329 100.19
Total, Class 1		58,233,939.33	13,885,464.48	6,379,722.76	69,345,884.99	15,310,555.25	221 49.78
Class 2 — Leicester, Cotswold, Lincolnshire, down combing wools, Canada long wools, or other like combing wools of English blood, and usually known by the terms herein used, and also hair of the camel, Angora goat, alpaca and other like animals —							
Wool, washed and unwashed —							
On the skin (pounds)	11 cents per pound	96,490.00	20,307.00	10,613.88	70,812.00	16,717.00	7,789.32
							236 46.60

Not on the skin (pounds)	12 cents per pound,	8,766,205.50	2,138,091.82	1,051,944.66	8,787,594.00	2,314,039.00	1,054,511.25	.263	45.57
Scoured wool (pounds)	36 cents per pound,	40.00	12.00	14.40	40.00	12.00	14.40	.30	120.00
Camel's hair—									
Washed and unwashed (pounds) . .	12 cents per pound,	26,694.00	7,692.00	3,203.28	55,911.00	14,391.00	6,709.32	.257	46.62
Hair of the Angora goat, alpaca, and other like animals—									
Washed and unwashed (pounds) . .	12 cents per pound,	2,725,024.25	986,615.00	327,002.92	2,029,925.00	632,330.00	243,691.00	.312	38.52
Sorted (pounds)	24 cents per pound,	1,500.00	994.00	360.00	. . . . .	. . . . .	. . . . .	. . .	. . .
Total, Class 2		11,615,933.75	3,153,711.82	1,393,139.14	10,944,282.00	2,977,489.00	1,312,615.29	.272	44.08
Class 3—Donkoi, native South American, Cordova, Valparaiso, native Smyrna, Russian camel's hair, etc.									
Valued 12 cents or less per pound—									
Wool, washed and unwashed—									
On the skin (pounds)	3 cents per pound,	1,326,260.00	131,737.00	39,787.80	3,206,003.00	333,847.00	96,180.07	.104	28.81
Not on the skin (pounds)	4 cents per pound,	64,790,565.00	7,094,605.00	2,691,622.60	76,353,266.90	8,401,691.00	3,054,130.87	.110	36.35
Camel's hair, Russian, washed and unwashed (pounds)	4 cents per pound,	560,699.00	66,658.00	22,427.96	143,085.00	15,519.00	5,723.40	.108	36.88
Valued over 12 cents per pound—									
Wool, washed and unwashed—									
On the skin (pounds)	6 cents per pound,	33.00	6.00	1.98	. . . . .	. . . . .	. . . . .	. . .	. . .
Not on the skin (pounds)	7 cents per pound,	26,463,801.00	4,789,641.00	1,852,466.09	30,084,637.57	5,508,034.00	2,105,926.03	.183	38.23
Scoured (pounds)	21 cents per pound,	110.00	22.00	23.10	. . . . .	. . . . .	. . . . .	. . .	. . .
Camel's hair, Russian, washed and unwashed (pounds)	7 cents per pound,	2,909,478.00	450,413.22	203,663.46	3,693,542.15	594,273.00	258,547.95	.161	43.51
Total, Class 3		96,050,946.00	12,533,082.22	4,709,992.99	113,480,554.62	14,853,364.00	5,520,508.12	.131	37.17
Total, wools, etc., unmanufactured		165,900,839.08	29,572,258.52	12,482,854.91	193,770,721.61	33,141,408.25	14,454,234.25	.171	43.61
Manufactures composed wholly or in part of wool, worsted, the hair of the camel, goat, alpaca, or other animals—									
Wool and hair advanced in any manner, or by any process of manufacture, beyond the washed and scoured condition, not especially provided for—									
Valued at not more than 40 cents per pound (pounds)	33 cents per pound and 50 per cent.	74.00	19.00	33.92	456.00	167.00	233.98	.366	140.11
Valued over 70 cents per pound (pounds)	44 cents per pound and 55 per cent.	50.03	111.35	83.30	135.25	368.60	263.56	2.67	71.50
Total advanced		124.03	130.35	117.22	594.25	535.60	497.44	.90	92.88

Imports of Wool and Manufactures of Wool, entered for Consumption, Years ending June 30, 1911 and 1912. Quantities, Values, Rates of Duty, and Accruing Duties. — Continued.

ARTICLES.	Rates of duty.	1911.				1912.			
		Quantities.	Foreign values.	Duties.	Quantities.	Foreign values.	Duties.	Value per unit of quantity.	Average. Ad valorem duty.
Wools, hair of the camel, etc. — <i>Continued.</i>									
Manufactures composed wholly or in part of wool, worsted, etc. — <i>Continued.</i>									
Wool and hair advanced beyond the washed and scoured condition. — <i>Continued.</i>									
Rags, mungo, flocks, nolls, shoddy, and waste —									
Nolls (pounds)	20 cents per pound .	170,530.00		Dollars. 34,106.00	232,064.00		Dollars. 46,412.80	.537	37.27
Rags and flocks (pounds)	10 cents per pound .	241,800.00		68,253.00	85,933.00		26,303.00	.306	32.67
Mungo (pounds)	10 cents per pound .	11,079.00		3,454.00					
Wool extract, yarn, thread, and all other wastes not especially provided for (pounds)									
Total rags, mungo, flocks, nolls, etc.	20 cents per pound,	37,850.00	13,010.00	7,570.00	44,310.00	17,184.00	8,862.00	.388	51.57
		461,259.00	191,391.00	66,963.90	362,307.00	168,007.00	63,868.10	.464	38.02
Combed wool or tops, made wholly or in part of wool or camel's hair —									
Valued at more than 20 cents per pound (pounds)	36½ cents per pound and 30 per cent.				283.00	176.00	156.56	.622	88.95
Total combed wool or tops, etc. (pounds)					283.00	176.00	156.56	.622	88.95
Yarns, made wholly or in part of wool —									
Valued not more than 30 cents per pound (pounds)	27½ cents per pound and 35 per cent.	35.75	8.62	12.86	323.50	83.90	118.36	.259	141.07
Valued more than 30 cents per pound (pounds)	38½ cents per pound and 40 per cent.	177,489.73	186,645.41	142,991.88	60,708.73	59,386.26	47,126.75	.978	79.36
Total yarns		177,525.48	186,654.03	143,004.74	61,300.23	59,470.16	47,245.11	.974	79.44

Imports of Wool and Manufactures of Wool, entered for Consumption, Years ending June 30, 1911 and 1912. Quantities, Values, Rates of Duty, and Accruing Duties. — Continued.

ARTICLES.	Rates of duty.	1911.			1912.			Average. rate of duty.
		Quantities.	Foreign values.	Duties.	Quantities.	Foreign values.	Duties.	Value per unit of quantity.
Wools, hair of the camel, etc. — <i>Continued.</i> Manufactures composed wholly or in part of wool, worsted, etc. — <i>Continued.</i> Carpets and carpeting — Saxony, Wilton, and Tournay vel- vet carpets, square yards	60 cts. per sq. yd. and 40 per cent.	17,204.44	Dollars. 40,183.00	Dollars. 26,395.86	11,414.17	Dollars. 23,307.00	Dollars. 16,171.30	Dolls. Fr. ct. 2.04 69.38
Tapestry Brussels, printed on the warp or otherwise (square yards)	28 cents per sq. yd. and 40 per cent.	446.30	407.07	287.78	390.00	225.00	199.20	.577 88.53
Treble ingrain, three-ply, and all chain Venetian carpets (square yards)	22 cts. per sq. yd. and 40 per cent.	4,835.00	4,253.00	2,764.90	8,510.36	8,942.00	5,449.52	1.05 60.94
Velvet and tapestry velvet carpets, printed on the warp and otherwise (square yards)	40 cts. per sq. yd. and 40 per cent.	23,003.56	45,288.00	27,316.62	37,664.78	68,338.00	42,401.11	1.81 62.05
Wool, Dutch, and two-ply ingrain carpets (square yards)	18 cts. per sq. yd. and 40 per cent.	10.00	12.00	6.60	366.00	430.00	237.88	1.17 55.32
Carpets and carpeting of wool, and flax or cotton, not especially pro- vided for (square yards)	50 per cent.	25,102.80	35,005.10	17,502.55	19,702.76	32,834.42	16,417.21	1.67 50.00
Total carpets and carpeting		1,011,524.85	3,887,734.06	2,399,368.73	885,715.95	3,997,991.00	2,331,735.43	4.51 58.32

Cloths, woolen and worsted — Valued not more than 40 cents per pound (pounds)	7,738.75	2,564.40	3,835.98	10,123.38	3,524.30	5,102.89	.348	144.79
Valued more than 40 cents and not more than 70 cents per pound (pounds)	353,937.80	211,275.75	261,370.47	282,239.56	166,659.47	207,515.18	.590	124.51
Valued above 70 cents per pound (pounds)	4,461,846.53	5,012,657.92	4,720,174.00	3,921,317.61	4,513,584.12	4,207,851.06	1.15	93.23
Valued above 70 cents per pound (pounds) (reciprocity treaty with Cuba)	30.00	53.00	33.88					
Total cloths, etc. (pounds)	4,823,553.08	5,226,551.07	4,985,414.93	4,213,680.55	4,683,767.89	4,420,460.13	1.11	94.38
Dress goods, women's and children's, coat linings, Italian cloths, and goods of similar description — The warp consisting wholly of cotton or other vegetable materials, with the remainder of the fabric com- posed wholly or in part of wool — Weighing 4 ounces or less per square yard —								
Valued not exceeding 15 cents per square yard and not above 70 cents per pound (square yards)	7,247,614.25	950,285.00	982,465.51	2,902,248.11	402,206.00	404,200.37	.139	100.51
Above 70 cents per pound (square yards)	1,198,830.25	172,278.00	178,671.02	706,653.67	102,228.00	105,691.16	.145	103.39
Valued above 15 cents per square yard and not above 70 cents per pound (square yards)	301,805.50	51,756.00	50,022.44	202,719.00	33,151.00	32,793.02	.104	98.92
Above 70 cents per pound (square yards)	5,521,564.74	1,124,685.50	1,060,302.22	4,141,606.23	827,894.80	786,670.62	.200	95.02
Weighing over 4 ounces per square yard —								
Valued not more than 40 cents per pound (pounds)	918.00	346.00	452.14					

Imports of Wool and Manufactures of Wool, entered for Consumption, Years ending June 30, 1911 and 1912. Quantities, Values, Rates of Duty, and Accruing Duties. — Continued.

ARTICLES.	Rates of duty.	1911.				1912.			
		Quantities.	Foreign values.	Duties.	Quantities.	Foreign values.	Duties.	Value per unit of quantity.	Average.
Wools, hair of the camel, etc.— <i>Continued.</i> Manufactures composed wholly or in part of wool, worsted, etc.— <i>Continued.</i> Dress goods, women's and children's, etc.— <i>Cont.</i> Valued more than 40 and not more than 70 cents per pound (pounds), 44 cents per pound and 50 per cent less 5 per cent. .		37,837.05	Dollars. 23,086.00	Dollars. 26,772.44	31,026.45	Dollars. 19,263.00	Dollars. 22,118.98	Dollars. Pr. ct. .621 114.83	
Valued more than 70 cents per pound (pounds)		252,042.50	228,932.05	224,971.07	274,341.27	255,604.40	248,227.90	.932	97.11
Composed wholly or in part of wool — Weighing 4 ounces or less per square yard — Valued not above 70 cents per pound (square yards)	11 cents per sq. yd. and 50 per cent. . 11 cents per sq. yd. and 55 per cent. .	24,877.76	5,030.50	5,251.80	22,101.94	3,950.25	4,406.35	.179	111.55
Valued above 70 cents per pound (square yards)		10,400,807.97	2,333,034.32	2,427,257.89	3,912,799.90	907,099.72	929,312.85	.232	102.45
Weighing over 4 ounces per square yard — Valued not more than 40 cents per pound (pounds)	33 cents per pound and 50 per cent. .	186.00	57.00	89.88	275.00	89.00	135.25	.324	151.97
Valued more than 40 and not more than 70 cents per pound (pounds)	44 cents per pound and 50 per cent. .	279,347.21	162,114.00	203,969.77	130,609.04	79,375.40	97,157.18	.608	122.40
Valued more than 70 cents per pound (pounds)	44 c. p. lb. & 55 p. c. .	1,400,909.24	1,312,708.50	1,338,390.18	730,122.77	736,099.93	726,108.94	1.01	98.64
Total dress goods			6,364,272.87	6,498,616.36		3,566,964.50	3,356,882.62	. . .	99.70
Felts not woven (pounds)	44 c. p. lb. & 60 p. c. .	78,249.00	96,892.34	92,564.97	90,679.50	115,481.91	109,187.85	1.27	94.55

Flannels for underwear —									
Valued at not more than 40 cts. per pound (pounds)	16.00	6.80	6.00	10.00	3.90	3.37	.390	86.41	
Valued at more than 40 and not more than 50 cents per pound (pounds)	2.20	1.00	1.08	325.00	155.00	161.50	.477	104.19	
Valued above 50 and not above 70 cents per pound (square yards)	108.00	56.00	39.88	.....	.....	.....	.....	.....
Valued above 70 cents per pound (square yards)	27,801.00	8,434.00	7,696.81	17,754.74	9,379.00	7,111.46	.528	75.82	
Weighing over 4 ounces per square yard —									
Valued more than 50 and not more than 70 cents per pound (pounds)	3,318.00	2,030.50	2,475.16	384.00	282.00	309.96	.734	109.91	
Valued more than 70 cents per pound (pounds)	89,359.14	75,501.00	80,843.57	107,175.50	119,054.40	112,637.14	1.11	91.61	
Total flannels, etc. . . . .	.....	86,029.30	91,062.50	.....	128,874.30	120,223.43	.....	93.29	
Knit fabrics (not wearing apparel) —									
Valued at not more than 40 cents per pound (pounds)	197.00	63.00	96.51	11.50	4.00	5.79	.348	144.75	
Valued more than 40 and not more than 70 cents per pound (pounds),	1,653.00	1,060.00	1,257.32	1,007.00	658.00	772.08	.652	117.44	
Valued above 70 cents per pound (pounds)	12,513.00	13,734.00	13,059.42	7,780.00	8,428.00	8,058.60	1.08	95.62	
Total knit fabrics (not wearing apparel)	14,363.00	14,857.00	14,413.25	8,798.50	9,090.00	8,836.47	1.03	97.21	
Plushes and other pile fabrics —									
Valued more than 40 and not more than 70 cents per pound (pounds)	2,790.00	1,698.00	2,076.60	.....	.....	.....	.....	.....
Valued more than 70 cents per pound (pounds)	10,227.00	10,011.00	10,005.93	7,480.33	8,990.00	8,235.84	1.20	91.61	
Total plushes, etc.	13,017.00	11,709.00	12,082.53	7,480.33	8,990.00	8,235.84	1.20	91.61	

Imports of Wool and Manufactures of Wool, entered for Consumption, Years ending June 30, 1911 and 1912. Quantities, Values, Rates of Duty, and Accruing Duties. — Continued.

ARTICLES.	Rates of duty.	1911.				1912.			
		Quantities.	Foreign values.	Duties.	Quantities.	Foreign values.	Duties.	Value per unit of quantity.	Average. Ad valorem duty.
Wools, hair of the camel, etc. — <i>Continued.</i>									
Manufactures composed wholly or in part of wool, worsted, etc. — <i>Continued.</i>									
Wearing apparel: Clothing, ready-made, and articles of wearing apparel, made up or manufactured wholly or in part, not specially provided for —									
Cloaks, dolmans, etc., for ladies' and children's apparel, and articles of similar description or used for like purposes (pounds) . . .	44 cents per pound and 60 per cent.	19,630.37	47,145.25	36,924.69	87,675.57	171,923.68	141,731.52	1.96	82.44
Hats of wool (pounds)	44 cents per pound and 60 per cent.	272,808.06	367,708.44	340,660.58	283,478.30	391,923.45	364,284.75	1.34	92.95
Knitted articles (pounds)	44 cents per pound and 60 per cent.	26,855.22	48,306.25	40,800.05	16,939.39	18,034.75	18,274.27	1.06	101.33
Shawls, knitted or woven (pounds)									
Other clothing, ready-made, and articles of wearing apparel, made up or manufactured wholly or in part (pounds)	44 cents per pound and 60 per cent.	607,264.37	1,794,081.19	1,343,644.90	576,040.46	1,608,155.72	1,218,351.08	2.79	75.76
Ditto		10.00	36.00		35.00	184.00		5.26	
Other clothing (reciprocity treaty with Cuba), (pounds)	44 cents per pound and 60 per cent.	48.00	97.00	63.46	21.00	80.00	45.80	3.81	57.25
Total wearing apparel (pounds)		926,616.02	2,257,374.13	1,762,093.68	974,189.72	2,190,301.60	1,742,686.42	2.25	79.56

Webbings, gorings, suspenders, band- ings, beltings, bindings, braids, edg- ings, fringes, gimps, cords, and other trimmings, etc. (pounds)	50 cents per pound and 50 per cent. .	36,998.98	74,718.26	63,330.54	31,969.20	72,438.86	59,448.02	2.27	82.07
All other manufactures wholly or in part of wool — Valued not more than 40 cents per pound (pounds)	33 cents per pound and 50 per cent. .	6,167.50	1,886.70	2,973.63	10,144.33	3,402.00	5,048.63	.335	148.40
Valued more than 40 cents per pound and not more than 70 cents per pound (pounds)	44 cents per pound and 50 per cent. .	98,586.00	49,569.00	68,162.34	52,728.10	28,854.00	37,627.38	5.47	130.41
Valued more than 70 cents per pound (pounds)	44 cts. per pound and 55 per cent.	192,424.32	285,449.99	241,664.39	196,136.15	296,204.91	249,262.41	1.51	84.13
Ditto from Philippine Islands . . .	Free	3.00	3.00	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
Ditto (reciprocity treaty with Cuba)	44 cents per pound and 55 per cent less 20 per cent .	12.00	24.00	14.78	34.00	48.00	33.09	1.41	68.94
Total manufactures of wool	Free Dutiable . . . . .	. . . . . . . . . .	3.00 18,791,075.69	. . . . . 16,483,661.61	. . . . . . . . . .	. . . . . 15,182,693.91	. . . . . 12,599,246.01	. . . . . . . . . .	. . . . . 82.98
Total wool and manufactures of	Free Dutiable . . . . .	. . . . . . . . . .	3.00 48,363,334.21	. . . . . 28,966,516.52	. . . . . . . . . .	. . . . . 48,324,102.16	. . . . . 27,053,480.26	. . . . . . . . . .	. . . . . 55.98

INDEX.

INDEX TO VOLUME XLII.

A.

	Page
A clear-cut economic issue, protection and free trade presented in the Presidential campaign platforms	271
A great work done, the report of the Tariff Board	52
A historical review of British efforts to crush American manufactures, by James M. Swank	277
American-made cloths, action of the Boston Wool Trade Association in favor of	53
Angora goat in the United States, the	321
An industry worth while, comment by Professor Taussig on the wool manufacture and reply by W. L. Marvin	83
Annual Wool Review, by William J. Battison	307
Review of the year	307
The number of sheep	310
The United States wool product of 1912, Table I.	310
Average weight and shrinkage	312
Value of the 1912 clip	313
Fleece, pulled and scoured wool, Table II.	314
Available supplies	315
The annual wool supply, 1890-1912	317
Slaughter and movement of sheep, 1887-1911	319
The course of prices (with chart)	320
The Angora goat	321
Mohair production in the United States	323
Boston receipts and shipments of wool	324
Statistical tables, imports and exports of wool and woolens	326
Imports of wool manufactures, 1906-1912 (table)	333
Imports of wool and manufactures of wool entered for consump- tion	334, 402
London sales	334
South African wools	340, 361
Liverpool sales	342
Antwerp auctions	344
River Plate wools, exports and production, 1894-1912	346
The season in Buenos Ayres	347
Uruguay wools	349
Number of sheep in the world, Table XVIII.	350

	Page
Australasian sheep and wool statistics	352
Extension of wool-growing territory	362
Wool shipments to Japan	363
United States consumption of wool	364
Another futile attack in Congress, the revived Underwood-La Follette bill	274
Antwerp wool auctions, 1912	344
Argentine wools, imports of, into Europe, 1894-1912	346
Argentine wools, imports of, into the United States, 1904-1912	348
Australia, how wool growing pays in, "Wool Record" quoted	167
Australia, the wool manufacture in	82
Australian wool year, notes on the, Goldsbrough, Mort & Company	184
Australasian season of 1912, the	352
Australasian sheep, 1907-1911, number of	352
Australasian wool clip, the value of, 1881-1911	353
Australasian wool exports and sales	356, 359
Australasian wool, number of fleeces per bale, 1896-1912	356

B.

Bartlett, Captain Amos, obituary	381
Battison, William J., Annual Wool Review	307
Benedict, George W., quarterly report of the Boston wool market on domestic wools	94, 188, 304, 399
Blanchard, William A., quarterly report of the Boston wool market on pulled wools	95, 189, 305, 400
Border tweeds	89
Boston receipts and shipments of wool, 1911-12	323
Bradford trade in 1911, the	62
English wool consumption	63
Mohair	66
Yarns	68
Worsted coatings	73
The year in Leeds	73
British woollen and worsted industry in 1912, extract from report of Consul Franklin D. Hale	397
Brown, Jacob F., on marketing of wool, address at the National Wool Growers' Convention, December, 1911	36

C.

Children, sending away of, from Lawrence, 1912	251
Clothing, ready-made, the Tariff Board report on	26
Cloths, prices of certain worsted, 1900-1912	388
Commercial progress of Ireland, Consul Hunter Sharp quoted	176
Committee on Ways and Means, minority report of, on the Underwood cotton bill	155

	Page
Comparative statement of imports and exports of wool and manufac- tures of wool for the twelve months ending December 31, 1910 and 1911	91
Comparative statement of imports and exports of wool and manufac- tures of wool for the twelve months ending June 30, 1911 and 1912	301
Costs, the Tariff Board report on relative	20
Cots in wool	294
Cotton bills, the new	145
The Underwood bill	145
The Hill bill	149
Letter from Henry C. Emery	154
The minority report	155
Cummins, Hon. Albert B., remarks on introducing his proposed Sched- ule K	197
Cummins substitute for the Underwood Schedule K, 1912	191
Curl in wool fibers	292

D.

Did broad protection pay? by Roland Ringwalt	376
Directories, new textile	289, 382
Douty, D. E., wool investigations at the Bureau of Standards	266
Duties, the method of assessing, the Tariff Board report on	24

E.

Earnings in United States and British woolen industries compared	142
Editorial and industrial miscellany	52, 139, 271, 383
Effect of free wool in the Northwest, 1893-1896, by Robert C. Line in "Quarterly Journal of Economics"	170
Election of 1912, the national, by Winthrop L. Marvin	383
Emery, Henry C., Chairman of Tariff Board, confirming statements of cotton costs in Board's report	154
England, the rag trade of, in 1912	398
Ettor, Joseph J., leader in the Lawrence strike	227

F.

Finance Committee substitute for Schedule K, 1912	199
"Fines," those so-called weavers', an important decision for the mills by the Supreme Court of Massachusetts	282
Foss, Governor Eugene N., investigation of Lawrence strike urged by, 241, 244	241, 244
France, women's wages in provincial	298
Free trade and protection squarely presented in the Presidential cam- paign platforms	271

	Page
G.	
Glossary of the Tariff Board report	9
Gooding, Hon. Frank, address as president to the National Wool Growers' Convention, December 14, 1911	33
Gray wool fibers	293
H.	
Hale, United States Consul Franklin D., on the British woolen and worsted industry of 1912	397
"Handle" in wool fabrics, from the "Yorkshire Observer"	393
Haywood, William D., and the Lawrence strike	230
Hetzel, George C., letter to Hon. Oscar W. Underwood, December 29, 1911	75
Heyburn, Hon. Weldon B., remarks on Schedule K	198
Hill, Hon. E. J., address on the Underwood tariff bill	124
Hobbs, Franklin W., address to the Southern New England Textile Club, Providence, 1912, on "The Manufacturer's Responsibili- ties"	41
Home competition, the factor of	56
Hourwich, Isaac H., Ph.D., work on "Immigration and Labor" reviewed	367
How wool growing pays in Australia	167
Hurst, Consul C. B., women's wages in provincial France	298
I.	
Immigrants, rapid increase of illiterate	219
"Immigration and Labor," by Isaac A. Hourwich, Ph.D., review of, by Winthrop L. Marvin	367
Imports and exports of wool and manufactures of, comparative state- ment, December 31, 1910 and 1911	91
Imports and exports of wool and manufactures of, comparative state- ment, June 30, 1911 and 1912	301
Imports of manufactures of wool, 1906-1912 (table)	333
Imports of wool and manufactures of wool entered for consumption, years ending June 30, 1911 and 1912	334, 402
Imports of wool and woolens, statistics of	326
Imports of wool into Boston, New York and Philadelphia (tables) 327, 328, 329	
India, the woolen industry of	187
Industrial Workers of the World, aim of the	229
Intervention in Lawrence strike by authorities, reason for	253
Ireland, commercial progress of	176
Ireland, textile industry in	178
J.	
Japan, wool shipments to	363

K.

K (1912), Cummins substitute for Schedule	191
K (1912), Finance Committee substitute for Schedule	199
K (1912), La Follette substitute for Schedule	207
Kemps	296
Kilowatt, the relation of the horse-power to the	297

L.

La Follette bill in the House, the (1912)	210
La Follette bill in the Senate, the (1912)	210, 212
La Follette substitute for Schedule K, the (1912)	207
Lawrence strike of 1912, the, by John Bruce McPherson	219
The outbreak and the reason given for it	221
Beginning of the strike	223
Depression in the textile industry	224
The outbreak in the Washington Mill	225
Leader Ettor's prompt appearance	227
Aim of the Industrial Workers of the World	229
Violence and destruction of capitalism advocated	230
Formulated and other grievances of the strikers	234
Wages paid in the industry	237
Investigation urged by Governor Foss	241
Liberty of speech abused	242
A legislative conciliation committee	246
Action by the skilled crafts	250
Sending away of children	251
Investigations and their result	254
Close of the strike	256
A campaign of misrepresentation	258
Lessons of the strike	263
Lawrence, the great strike in, in retrospect	139
Line, Robert C., the effect of free wool in the Northwest, 1893-1896	170
Lippitt, Hon. Henry F., address before the Silk Association of America, February 10, 1912	54
Liverpool wool sales, 1912	342
London wool sales, 1912	334
Luster in fabrics, causes and character of	172

M.

Mack, Jacob W., obituary	138
Manufacturer's responsibilities, the, address of Franklin W. Hobbs to the Southern New England Textile Club, January 20, 1912	41
Stockholders not all wealthy	42
Average holdings small	43
What modern factories have done	46
The executive and his obligations	47
Manufacturing costs, the Tariff Board report on	10

	Page
Marvin, Winthrop L., annual report as Secretary	4
Letter to "Boston Transcript" in reply to Professor Taussig	86
Review of "Immigration and Labor"	367
The great strike in Lawrence in retrospect	139
The national election of 1912	383
Mauger & Avery, quarterly report of the Boston wool market on foreign wools	96, 190, 306, 401
McPherson, John Bruce, the Lawrence strike of 1912	219
Mellor, Benjamin F., obituary	137
Mohair production in the United States, 1900, 1912	323
Mondell, Hon. Frank W., address on the Underwood tariff bill	130

N.

National Association of Wool Manufacturers, forty-seventh annual meeting	1
Election of officers	2
Report of the Secretary, W. L. Marvin	4
National election of 1912, the, by Winthrop L. Marvin	383
National Wool Growers' Convention, Omaha, December 14, 1911	33
Remarks of President Gooding	33
Remarks of Jacob F. Brown	36
Election of officers	38
Resolutions adopted	39
New England (Australian) wools	182
Notes on the Australian wool year, Goldsbrough, Mort & Company's review	184

O.

Obituary	50, 136, 380
John G. Wright (with portrait, frontispiece)	50
Royal Chapin Taft	136
Benjamin F. Mellor	137
Jacob W. Mack	138
Major Charles A. Stott (with portrait)	380
Captain Amos Bartlett	381
Officers of the Association for 1912	2
Officers of the National Wool Growers Association, 1912	38

P.

Panama Canal, the, and Western wool	143
Payne-Hill tariff bill, the text of the (1912)	115
Payne, Hon. Sereno E., address on the Underwood (1912) tariff bill	129
Penrose, Hon. Boies, address on introducing Finance Committee substitute for Schedule K	204
Picks, proposed standard weaving price list per thousand	168
President Taft's veto message on the Underwood-La Follette bill, 1912	213

	Page
Prices of yarns and cloths, list of	387
Prices, the course of wool, 1912 (with chart)	320
Prices, the Tariff Board report on relative	19
Protection and free trade squarely presented in the Presidential, 1912, campaign platforms	271
Protection, did broad pay? by Roland Ringwalt	376
Pulled wool, quantity of, in 1912	311

Q.

Quarterly report of the Boston wool market	94, 188, 304, 399
--	-------------------

R.

Rag trade in England, 1912	398
Ready-made clothing, the Tariff Board report on	12
Relation of the horse-power to the kilowatt, United States Bureau of Standards quoted	297
Report of the Tariff Board	8
Synopsis of the report	9
Part I., analysis and glossary of Schedule K	9
Raw wool, production and shrinkage	9, 13
Report on manufacturing costs	9, 20
Report on ready-made clothing	9, 26
Report on wages and efficiency of labor and machinery	9, 31
Resolutions adopted by National Wool Growers' Convention, Omaha, December, 1911	39
Review of the year 1912	307
Ringwalt, Roland, did broad protection pay?	376
Ritch, W. T., some peculiarities of the wool fiber	290
River Plate wools, exports and production, 1894-1912	346

S.

Schedule K, Cummins substitute for (1912)	191
Schedule K, Finance Committee substitute for (1912)	199
Schedule K, La Follette substitute for (1912)	207
Senator Lippitt on protection, address at the annual meeting of the Silk Association of America, February, 1912	54
The factor of home competition	56
No monopoly in textiles	58
No excessive profits	59
A revision in the dark	60
Sharp, Consul Hunter, on commercial progress of Ireland	176
Sheep, number of, in Australasia, 1907-1911	352
Sheep, number of, in the United States, 1912 (table)	310
Sheep, number of, in the world, 1912 (table)	350
Sheep, slaughter and movement of, in the United States, 1887-1911	319
Sheep, the Leicester, "Wool Record" quoted	181

	Page
Smith, Sir Swire, on technical education at Keighley	161
Some peculiarities of the wool fiber, by W. T. Ritch	290
South African wools	340, 361
Standards, wool investigations at the Bureau of	266
Stott, Major Charles A., obituary, with portrait	380
Suint and yolk	291
Swank, James M., a historical review of British efforts to crush American manufactures	277

T.

Taft, Hon. Royal C., obituary	136
Taft, President William H., veto of the Underwood-La Follette bill	213
Tariff Board facts	57
Tariff Board, the report of the	8
Tariff bill, the text of the Hill cotton	149
Tariff bill, the text of the Payne-Hill wool	115
Tariff bill, the text of the Underwood cotton	145
Tariff bill, the text of the Underwood wool	105
Taussig, Professor F. W., address on wool manufactures	83
Letter of Winthrop L. Marvin to	86
Technical education at Keighley, reminiscences of Sir Swire Smith	161
Textile industry in Ireland	178
Textiles, no excessive profits in	59
Textiles, no monopoly in	58
Those so-called weavers' "fines," opinion of the Supreme Court of Massachusetts	282
Tweeds, border	89

U.

Underwood bill before the House, the	123
Underwood bill before the Senate, the	134
Underwood bill, the report of the Republican minority on	108
Underwood bill, the revenue expected from the	101
Underwood bill, the text of the	105
Underwood-La Follette bill, the, the final action in Senate and House, with the President's veto	191
The Cummins substitute	191
Address of Senator Cummins	197
The Finance Committee substitute	199
Statement of Senator Penrose	204
Text of the La Follette bill	207
The La Follette bill in the Senate	210, 212
The La Follette bill in the House	210
President's Taft's veto message	213
The veto sustained by the Senate	217
Underwood, Hon. Oscar W., letter from George C. Hetzel	75

	Page
Underwood wool and woolen bill, the, second consideration in Congress,	97
Majority report of Chairman Underwood	97
Expected revenue	101
Text of the bill	105
Views of the Republican minority	108
Text of the Payne-Hill bill	115
The Underwood bill before the House	123
Address of Hon. E. J. Hill	125
Address of Hon. Frank B. Willis	127
Address of Hon. Sereno E. Payne	129
Address of Hon. Frank W. Mondell	130
The Underwood bill in the Senate	134
Uruguay wools, imports of, into the United States, 1904-1912,	349

V.

Value of the wool product, 1901-1912	315
Veto of the Underwood-La Follette bill sustained by the Senate . .	217

W.

Wages and efficiency, the Tariff Board report on	12, 31
Wages in provincial France for women	298
Weavers' " fines," an important decision for the mills by the Supreme Court of Massachusetts	282
Weaving price list per thousand picks, proposed standard of	168
Western wool and the Panama Canal	143
Willis, Hon. Frank B., address on the Underwood tariff bill	127
Wilson, Dr. Woodrow, quoted	273
Women's wages in provincial France, Consul C. B. Hurst	298
Wood, William M., statement of, to striking operatives, January, 1912,	233
Wool and manufactures of, imports of, entered for consumption, years ending June 30, 1911 and 1912	334, 402
Wool auctions, Antwerp, 1912	344
Wool, Australasian, number of fleeces per bale, 1896-1912	356
Wool, available supplies of	315
Wool, Boston receipts and shipments of	323
Wool clip of 1912, value of the	313
Wool clip of United States changing character, from the " National Wool Grower "	391
Wool consumption in England, estimate of 1905-1911	63
Wool fibers, curl in	292
Wool fibers, gray	293
Wool fiber, some peculiarities of the, by W. T. Ritch	290
Wool, first Australian shipment of	358
Wool, fleece, pulled and scoured, 1888-1912, Tables II. and III. . . .	314
Wool imported into Boston, New York and Philadelphia by countries of production and immediate shipment, 1912	327, 328, 329

	Page
Wool, imports of Argentine, into the United States, years 1904-1912, . . .	348
Wool, imports of Uruguayan, into the United States, 1904-1912 . . .	349
Wool, imports of manufactures of, 1906-1912	333
Wool in the Northwest, the effect of free, by Robert C. Line	170
Wool investigations at the Bureau of Standards, Washington, D.C., by D. E. Douty	266
Wool manufacture in Australia, the	82
Wool manufactures, the Tariff Board report on	18
Wool market in the West, the, "Textile Manufacturers Journal" quoted	157
Wool market, quarterly report of the Boston 94, 188, 304, . . .	399
Wool, percentage of breeds of, in Australasia	359
Wool prices, the course of, 1912 (with chart)	320
Wool production of the United States, 1912	310
Wool production of the world, 1912 (table)	366
Wool rates from Detroit lower	166
Wool, raw, the Tariff Board report on	10, 13
Wool Review, the Annual	307
Wool sales, Liverpool, 1912	342
Wool sales, London, 1912	334
Wool shipments to Japan	363
Wool Trade Association, the Boston, in favor of American-made cloths, .	53
Wool, United States consumption of	364
Wool, value of the Australasian clip, 1881-1911	353
Wool year, the Australian, Goldsbrough, Mort & Company	184
Wools for the woolen trade, relative demands of the combing and card- ing industry in Great Britain, from the "Wool Record"	388
Wools (New England), Australian	182
Woolen industry of India, the	187
Worsted cloths, prices of certain, 1900-1912	388
Wright, Hon. Carroll D., quoted, "the Factory as an Element in Civilization"	44
Wright, John G., obituary (with portrait)	50

Y.

Yarns, prices of, 1905-1913	387
---------------------------------------	-----

Arlington Mills

Incorporated 1865

Lawrence, Mass.

FRANKLIN W. HOBBS, Treasurer

78 Chauncy St., Boston

Wool Combed on Commission

Worsted Tops Worsted Yarns

Worsted Dress Goods

Combed Cotton Yarns

Mercerized Yarns

William Whitman & Co.

Selling Agents

Boston

New York

Chicago

St. Louis

Baltimore

Philadelphia

FORSTMANN & HUFFMANN CO.

PASSAIC, N. J.

Mills at Passaic and Garfield, N. J.

Manufacturers of the well-known *F & H* Woolens
High Grade Broadcloths, Fine Woolen
and Worsted Fabrics for Ladies'
and Men's Wear

Fine Dry-Spun Worsted Yarns (French System)
in all varieties and counts for the
weaving and knitting trades

EXECUTIVE OFFICES: PASSAIC, N. J.

SELLING OFFICES

NEW YORK: Men's Wear, 334 Fourth Ave.
Dress Goods, 114 Fifth Ave.

BOSTON: 501 Washington St. **PHILADELPHIA:** 929 Chestnut St.

CHICAGO: Men's Wear, 206 South Market St.
Dress Goods, 53 West Jackson Boulevard

Selling Agent for Yarn: S. A. Salvage, 477 Broome St., N. Y.

Pacific Mills

LAWRENCE, MASS.
and DOVER, N. H.



MAKERS OF

Printed and Dyed
Cotton and Worsted
Dress Goods

EXECUTIVE OFFICES
70 Kilby Street, Boston

The Cleveland Worsted Mills Co.

GEORGE H. HODGSON, General Manager



MANUFACTURERS OF

ALL WORSTED FABRICS

Plain and Fancy Weave Serges
Skein Dye Fabrics and Mixtures

For Ladies' and Gentlemen's Wear

"LOOK AT THE CLOTH"

MILLS AT

CLEVELAND, OHIO

PROVIDENCE, R. I.

RAVENNA, O. JAMESTOWN, N. Y. PHILADELPHIA, PA.

BOTANY WORSTED MILLS

PASSAIC, N. J.

Manufacturers of

Fine Ladies' Dress Goods
Cloths and Men's Wear Goods
 and
Fine Worsted Yarns—Dry Spun

MAIN OFFICE: PASSAIC, N. J.

Dress Goods Sales Rooms:

NEW YORK: 200 Fifth Avenue, Fifth Ave. Bldg.	PHILADELPHIA: Burd Bldg., 9th and Chestnut Streets
BOSTON: 67 Chauncy Street	
CHICAGO: 157 W. Adams St.	SAN FRANCISCO: Room 462 Phelan Bldg.
KANSAS CITY: Baltimore Hotel Room 437	ST. LOUIS: Century Bldg. Room 544
	CLEVELAND: Room 906 Rockefeller Bldg.
	MINNEAPOLIS: Room 809 Palace Bldg.
DETROIT: Washington Arcade Bldg.	

Men's Wear Sales Rooms:

NEW YORK: 200 Fifth Avenue, Fifth Ave. Bldg.	CHICAGO: 157 W. Adams Street
--	--

REPRESENTATIVE FOR WORSTED YARNS:

WALTER D. LARZELERE, 300 Chestnut St., Philadelphia, Pa.

JEREMIAH WILLIAMS & CO.
WOOL

300-302 SUMMER STREET,
 BOSTON

BROWN & ADAMS
WOOL
Commission Merchants
 273 SUMMER STREET

Jacob F. Brown
 Samuel G. Adams
 Edmund F. Leland



BOSTON

J. KOSHLAND & CO.
WOOL

Commission Merchants

268-272 SUMMER STREET

BOSTON = = MASS.

HALLOWELL, JONES & DONALD

FOREIGN AND DOMESTIC WOOL

WILLIAM E. JONES
FRANK W. HALLOWELL
WILLIAM ELLERY
GORDON DONALD

252 SUMMER STREET

BOSTON

LEIGH & BUTLER,
Successors to EVAN ARTHUR LEIGH,
232 Summer Street, = = Boston, Mass.

PLATT'S Improved Machinery for Preparing, Drawing and Spinning
French Worsted Yarns.

PLATT'S Woolen and Worsted Carding Engines--Special Designs.

PLATT'S Cotton, Cotton Waste, Woolen and Worsted Mules.

PLATT'S Special Machinery for making Cotton Waste into Yarns

FOREIGN CLOTHING WOOLS

FOR CARDING AND FRENCH COMBING

DIRECT

FROM THE GROWER TO THE AMERICAN MANUFACTURER

BEST CLIPS FROM PUNTA ARENAS

HIGH 1-4 AND 3-8 GRADES

LIGHT SHRINKAGE URUGUAY FINE CLOTHING WOOL
CHOICEST AUSTRALIAN FINE AND MEDIUM CLOTHING WOOL

*Lowest Possible Net Costs—C. I. F. American Ports.
Very Favorable Financial Arrangements.*

DANIEL S. PRATT & CO., Importing Commission Merchants
Telephone Oxford 8. 185 Summer Street, Boston, Mass.

Farnsworth, Thayer & Stevenson

Domestic Wool

Foreign Wool

Noils

116-122 FEDERAL STREET
BOSTON

WILLIAM FARNSWORTH
THEODORE S. CONANT

FREDERICK W. THAYER
ROBERT H. STEVENSON, Jr.



Motors



Designed Solely for

Textile Mills

The electrical and mechanical features of G.-E. Textile mill motors were determined by a careful study of each machine used in the textile industry.

These motors embody the experience of twenty years, during which they have been pre-eminent in the textile industry. This is shown by the fact that over 75% of all electric power used in the textile mills of this country passes through G.-E. motors.

Minimum Attention

Where a small amount of power is desired, totally enclosed motors are furnished which minimize the attention required.

Waste packed bearings are used on motors for the individual driving of looms. They have been known to run two years without attention and with them oil fly is impossible.

Cool Operation Assured

The active magnetic material of motors made by the General Electric Company is exposed to the air. No *dead air spaces* (such good heat insulators) are found in the construction of these motors.

Designed Especially to Suit Machine Driven

Electrically G.-E. Motors vary, for "high efficiency" is necessary to reduce the cost of power to a minimum; high "power factor" is essential to keep down the investment at the generating plant; small "slip" is required to furnish the best speed regulation. The "starting torque" required to quickly and smoothly bring the motors up to speed must also be provided.

Each textile machine requires its own combination of these features in a driving motor. We make all the combinations and keep them strictly up to date by embracing every good feature of contemporary motor design.

Our textile mill specialists will carefully study your drive conditions and recommend an electric drive which will satisfy you.

General Electric Company

Largest Electrical Manufacturer in the World

General Office: Schenectady, N. Y.

District Offices in:

Boston Mass.	New York, N.Y.	Philadelphia, Pa.	Atlanta, Ga.
Cincinnati, Ohio	Chicago, Ill.	Denver, Colo.	San Francisco, Cal.

Sales Offices in all Large Cities

3542

Philadelphia Textile School

of the

Pennsylvania Museum and School
of Industrial Art

Established 1884

WOOL, WORSTED, COTTON, SILK

Courses of Study include the Technicalities of all Varieties
of Textiles. No Academic Studies.

Adequate Mechanical Equipment.

Especial Attention given to the Practical Application
of the Instruction

Illustrated Circular and Partial List of Former Students with their
Occupations, Sent on Application to

E. W. FRANCE, Director

PINE and BROAD STREETS, PHILADELPHIA, PA.

Lowell

Textile School

Thoroughly Practical Instruction
Given in Every Branch of

TEXTILE MANUFACTURING

DAY and EVENING CLASSES

One of our five regular courses of instruction is :

Woolen and Worsted Manufacturing.

This includes wool sorting, scouring, picking, carding and spinning; worsted combing, drawing, spinning, twisting; woolen and worsted warp preparation. Weaving on all varieties of looms. Textile Design with cloth analysis and calculations; Chemistry and Dyeing.

The equipment of all departments is complete for practical instruction. Woolen and worsted department includes French spinning as well as the English or Bradford system. The Finishing department is thoroughly equipped with the latest woolen and worsted machines. Practical instruction in wool sorting by practical men.

REGULAR COURSES ARE:

- | | |
|-------------------------|-------------------------|
| 1. Cotton Manufacturing | 3. Textile Designing |
| 2. Wool Manufacturing | 4. Chemistry and Dyeing |
| 5. Textile Engineering | |
-

Catalogue will be sent free on application to

CHARLES H. EAMES, Secretary,

Lowell Textile School,

LOWELL, MASS.

KLAUDER = WELDON DYEING MACHINE CO.

Huddersfield, England

AMSTERDAM, N.Y.

Southern Agents, ALEXENDER & GARSED, Charlotte, N. C.

Will earn their cost **IN LABOR ALONE** in from 6 to 12
months, according to capacity

ARE SOLD ON 2 MONTHS' TRIAL

YOU TAKE NO RISKS

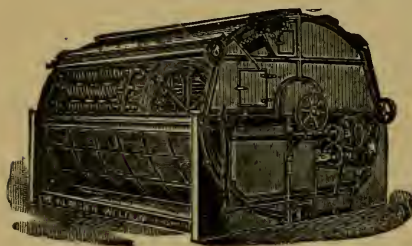
MACHINES FOR

DYEING—Worsted, Woolen, Cotton and Silk Skeins—Slubbing, Raw Cotton,
Wool, Waste, Rags, Knit Cloth, Shirts, Drawers, Hosiery, Tapes, Hats, Caps, etc.

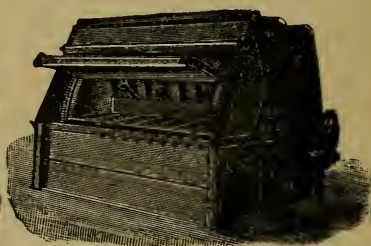
BLEACHING—Skeins, Raw Stock, Knit Cloth.

SCOURING—Woolen and Worsted Yarns.

SULPHUR COLORS—Skein, Raw Stock, Hosiery.



Skein and Slubbing Dyeing Machine.



Raw Wool and Cotton Dyeing Machine.

A. KLIPSTEIN & COMPANY,
129 PEARL STREET, NEW YORK.

DYESTUFFS AND CHEMICALS.

Agents for the Society of Chemical Industry,
Basle, Switzerland.

FAST COTTON BLUES AND BLACKS.

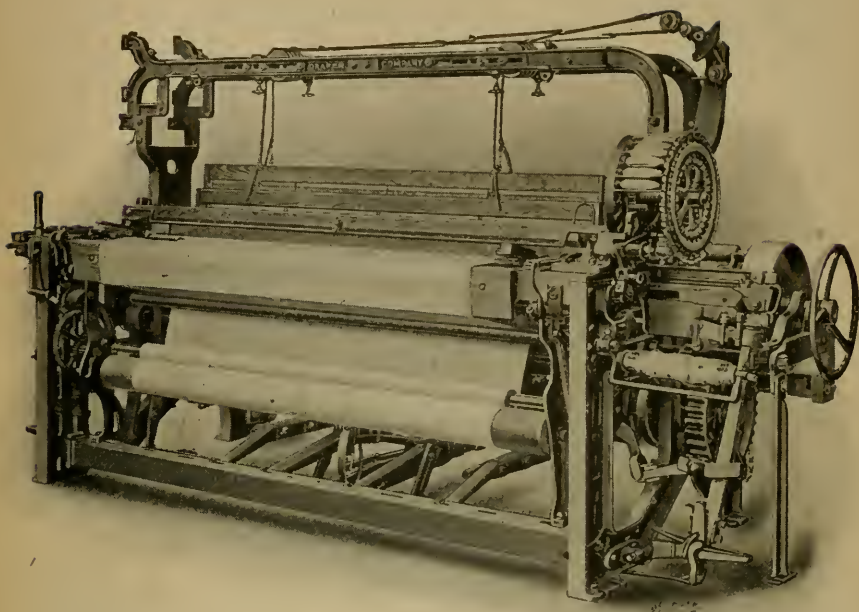
Also Full Line of Dyes for Union Goods.
Write for Particulars.

CAUSTIC POTASH 90 Per Cent.

For Wool Scouring.

BRANCHES:

BOSTON	283-285 Congress Street.
PHILADELPHIA	50-52 N. Front Street.
PROVIDENCE	13 Mathewson Street.
CHICAGO	145-147 W. Kinzie Street.
MONTREAL	34 St. Peter Street.



NORTHROP LOOMS

TRADE MARK REGISTERED

EARN *MORE WAGES FOR THE WEAVER
LARGER DIVIDENDS FOR THE MILL*

DRAPER COMPANY

HOPEDALE MASS.

Worsted Machinery

MADE IN THE

United States,
LOWELL MACHINE SHOP,
LOWELL, MASS.

SPINNING FRAMES with caps, rings, or flyers and any kind of spindles for long or short wool, and any gauge of rollers.

DANDY ROVERS and REDUCERS with all latest improvements

WEIGH BOXES and DRAWING BOXES with any kind of rollers and any number of spindles.

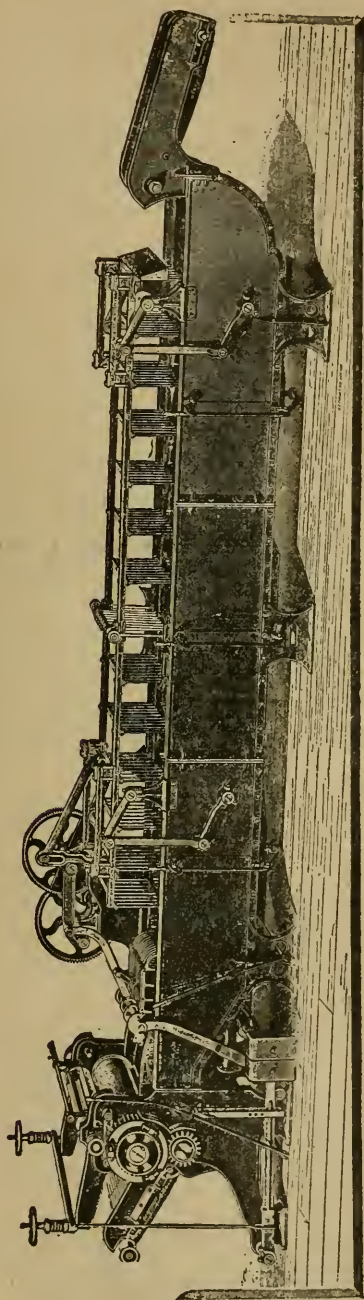
GILL-BOXES for drawing, fitted with cans or spindles.

GILL-BOXES for preparing before combing and finishing afterwards.

MODIFICATIONS will be made of the above machinery to suit different kinds of work.

REPAIRS for the foregoing furnished upon short notice.

C. G. SARGENT'S SONS, GRANITEVILLE, MASS.



PARALLEL RAKE WOOL WASHER.

The most perfect machine on the market for scouring combing-wools.

Will handle any grade of wool without stringing or felting the stock.

These machines are in use at the following places :

Geo. E. Kunhardt, Lawrence, Mass.

Gonic Mfg. Co., Gonic, N.H.

Arlington Mills, Lawrence, Mass.

Alex. Smith & Sons Carpet Co., Yonkers, N.Y.

John E. Mann, E. Weymouth, Mass.

and others too numerous to mention.

Geo. C. Moore, N. Chelmsford, Mass.

Lymansville Co., Providence, R.I.

Provo Woolen Mills Co., Provo City, Utah.

Thos. Kent Mfg. Co., Olifton Heights, Pa.

Saxonville Mills, Saxonville, Mass.

Peace Dale Mfg. Co., Peace Dale, R.I.

Tracy Worsted Co., Philadelphia, Pa.

Thos. Kent Mfg. Co., Olifton Heights, Pa.

For further particulars apply to **C. G. SARGENT'S SONS, Graniteville, Mass.,**

Builders of Burr Pickers, Wool Dryers, Carbonizers, Dusters, etc., etc.

THE
Whitin Machine Works,

WHITINSVILLE, MASS.

BUILDERS OF

COTTON MACHINERY,

Cards, Combing Machinery,
Railway Heads, Drawing Frames,
Spinning Frames, Spoolers,
Twisters, Reels, Long Chain Quillers,
Looms.

Southern Agent:

STUART W. CRAMER,

38 South Tryon St., Charlotte, N.C.
Equitable Building, Atlanta, Ga.

JAMES SPEED

HARRY STEPHENSON

SPEED & STEPHENSON

170 Summer Street, Boston, Mass.

Sole Agents in the United States and Canada for

J. B. FARRAR & SONS, HALIFAX, ENGLAND.

WORSTED MACHINERY

Including Gill Boxes, Drawing, Roving, Spinning, Twisting and Yarn Finishing Machinery

JOHN DAWSON, Ltd.

Wool Washing and Carbonizing Machines

JAMES SMITH & SON

Improved Noble Combs and Ball Winders

DAVID SOWDEN & SONS

Looms for Men's Wear, Dress Goods,
Linings, &c.

WILSON & CO., BARNSLEY, Ltd.

High Class Mill Bobbins

THOMAS BLACKBURN

Spindle Bands and Tape

JOHN HETHERINGTON & SONS, Ltd.

Improved Worsted Cards and Mules
Duplex Woolen Cards with Josephy Tape
Condensers, to take off up to 240 ends,
Improved Woolen Mules, Farnaughts, etc.

BOLDY & SON, Ltd.

Lister Nip Combs, Hot Air Drying Back-
washing Machines, Grease Extracting Plants

HEARL HEATON & SONS

Grinding Tackle and Emery Fillet

S. HALEY & SONS, Ltd.

Card Clothing of Every Description

Machine Shop at Lawrence, Mass., For Repairs, Change
Gears and Parts

Fast Colors for Cotton and Wool
Helindone Colors
Indigo M L B

H. A. METZ & CO.

New York, 122 Hudson Street

Boston, 140-142 Oliver St.

Providence, 23 S. Main St.

Charlotte, 210 S. Tryon St.

San Francisco, 580-582 Howard St.

Philadelphia, 104 Chestnut St.

Chicago, 317 N. Clark St.

Atlanta, 1418 Empire Bldg.

Montreal, 30 St. Francois Xavier

Laboratories: Newark, N. J.

[St.]

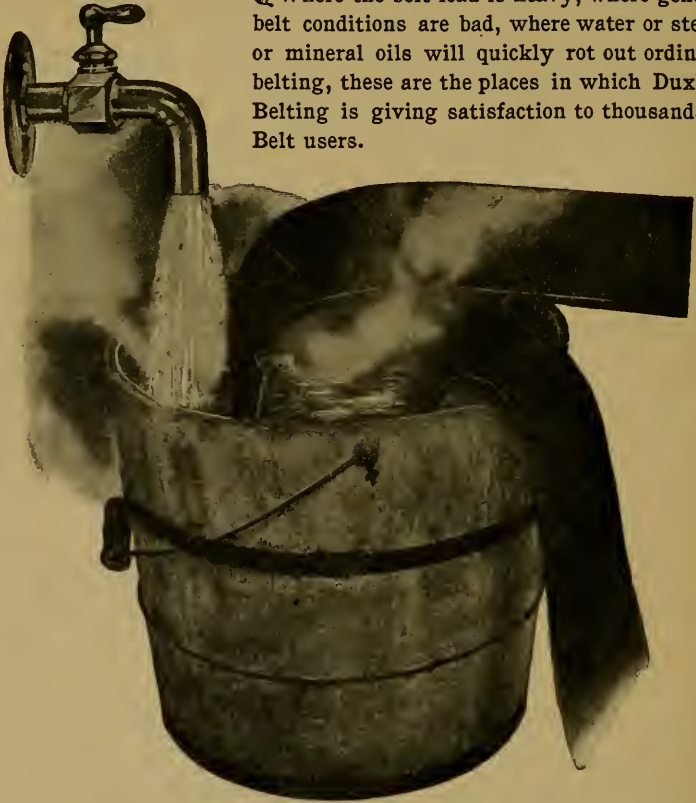
SOLE AGENTS IN U. S. AND CANADA FOR

Farbwerke vorm. Meister, Lucius & Bruening

You can submerge in boiling water and leave it there for an hour or two without injury

¶ We can supply you with a Duxbak Belt that is absolutely waterproof, or we will give you one that is steamproof. In either case you will have a Belt that is impervious—a Belt that will run slack without slipping—a Belt that will require but little attention and no repairs.

¶ Where the belt load is heavy, where general belt conditions are bad, where water or steam or mineral oils will quickly rot out ordinary belting, these are the places in which Duxbak Belting is giving satisfaction to thousands of Belt users.



Chas. A. Schieren Company
ESTABLISHED 1868.
**Tanners
Belt Manufacturers**

NEW YORK, 30-38 Ferry St.
CHICAGO, 128 West Kinzie St.
BOSTON, 641-643 Atlantic Ave.,
Opp. South Station
PHILADELPHIA, 226 North 3d St.
PITTSBURG, 205 Wood St.
DENVER, 1752 Arapahoe St.
Brooklyn, N. Y., Cor. 13th St. &
3d Ave.
HAMBURG, GERMANY, Auf dem
Saude 1
OAK LEATHER TANNERIES,
Bristol, Tenn.



Raw Material of Any Kind Varies

NO ONE CAN HELP THAT

But they can help knowingly buying cheap grades of raw material which need doctoring to make up into apparently first class finished products.

¶ Picked Packer hides used in the manufacture of Schieren's Duxbak Waterproof Leather Belting may be in some cases only 99% A-1—if we could find any means of culling out that objectionable 1% we would not feel called upon to guarantee our finished belts. We know that our process of manufacture is so perfect that nothing of the original high quality of the hides is lost in making belting, and the possibility of this 1% (slightly under A-1 quality leather) affecting the belting as a whole is very remote. But we make this concession as a necessary one, simply because we want you to know our side of the sale of belting. Your side is to get measurements right, see that pulleys line up and keep track of comparative results, as nearly as possible.

Schieren's Duxbak is guaranteed fully against water, moisture, fumes of any kind and for 100% quality, not 99

WRITE FOR PRINTED MATTER—IT'S INTERESTING

Chas. A. Schieren Company
 ESTABLISHED 1868
Tanners
Belt Manufacturers

NEW YORK, 30-33 Ferry St.
 CHICAGO, 123 West Kinzie St.
 BOSTON, 641-643 Atlantic Ave.,
 Cor. South Station
 PHILADELPHIA, 226 North 3d St.
 PITTSBURG, 235 Wood St.
 DENVER, 1752 Arapahoe St.
 Brooklyn, N. Y., Cor. 13th St. &
 3d Ave.
 HAMBURG, GERMANY, Auf dem
 Sande 1
 OAK LEATHER TANNERIES,
 Bristol, Tenn.

Woolen and Worsted Fabrics for Men's and Women's Wear require Colors possessing particular Fastness, and especially those for the production of

Navy Blues

which shades may be produced with ease and economy of labor, by the use of Azo Fast Blues, Fast Navy Blues, Lanacyl Blues, and Azo Fast Violets. These colors are distinguished by their good qualities of level dyeing, penetration and clearness of tone.

Cassella Color Company

Main Office and Warehouse

182-184 Front Street - - New York

BRANCHES

BOSTON	-	-	-	-	-	39 Oliver Street
PHILADELPHIA	-	-	-	-	-	126-128 So. Front Street
PROVIDENCE	-	-	-	-	-	64 Exchange Place
ATLANTA	-	-	-	-	-	47 North Pryor Street
MONTREAL	-	-	-	-	-	59 William Street

Date Due

Date Loaned

[illegible]

TS1600
N2

677.3062^x
N216
4.42
1912

TS1600
N2

SMTI LIBRARY

